

A QUALITATIVE PHENOMENOLOGICAL STUDY OF INNER SPEECH USED AS  
A SELF-HELP TOOL AMONG ADULT REMOTE WORKERS

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### ABSTRACT

The COVID-19 pandemic and subsequent shift to remote work emphasized the importance of maintaining the well-being of adult remote workers. The problem studied was the awareness, understanding, and acceptance of inner speech/self-talk among adult remote workers. The purpose of this qualitative, phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech/self-talk. Inner speech/self-talk is an innate ability of higher mental functions that include reasoning, problem solving, planning and plan execution, attention, and motivation. Data collection involved the purposeful sampling of 10 participants who were adult remote workers. The semistructured interviews were conducted via Google Meet and were transcribed using Otter software. The data were manually coded, and they revealed three interconnected themes: the state of consciousness, self-regulation, and social interaction. The participants shared insights into the applications of inner speech and self-talk from coping with isolation and adapting to communication styles in remote work to managing emotions, enhancing self-discipline, and planning interactions. In conclusion, this study's implications extended to individuals, communities, and organizations. The study illuminated inner speech and self-talk functions in the lives of adult remote workers.

**Keywords:** inner speech, self-talk, remote workers, self-regulation, state of consciousness

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## CHAPTER 1: INTRODUCTION

The principal investigator of this study was an educator. During her coursework for teachers of English as a second language (TESL), in close collaboration with speech and occupational therapists, the principal investigator's intrinsic interest in linguistics, as well as social and behavior sciences, grew immensely. Geurts (2017) stated that people talk to other people, and people also talk to themselves, explaining that inner speech and self-talk is a type of overt speech that might be observable in public. Alderson-Day and Fernyhough (2015) stated that, when people talk to themselves in silence, they are engaging in their inner speech covertly. Alderson-Day and Fernyhough continued that, when people talk to themselves aloud or in silence, this type of inner experience is described as self-talk. Geurts (2017) and Rovetta (2023) highlighted the significance of inner speech as an innate ability that plays a crucial role in higher mental functions (e.g., reasoning, problem solving, planning, plan execution, attention, and motivation), emphasized its critical role in facilitating cognitive processes, and underscored its significance as a self-help tool for maintaining well-being.

In March 2020, Ontario schools and businesses went into lockdown. This lockdown happened not only Canada, but also the whole world for the same reason—the COVID-19 pandemic (Bradbury-Jones & Isham, 2020). Science Advisory Table (2021) reported that, in September 2021, Ontario faced the fourth wave of COVID-19. The June 2021 model painted an alarming upward trend for the fall season. A group of scientific experts and health system leaders in Ontario suggested the possibility of the spread of the Delta variant in early 2021 (Bradbury-Jones & Isham, 2020; Meagher & Cheadle, 2020). The COVID-19 pandemic had a significant impact on where Canadian workers performed their jobs.

Although healthcare services have always been important, the multiple waves of COVID-19 altered people's day-to-day lives, forcing many industries to change the way they conducted business and to reorganize their workforce. In 2020, Stanford University published their Economic Policy Research, indicating that 42% of American adult workers between Ages 20–64 became full-time remote workers from home (Bloom, 2020). Bloom (2020) stated that these remote workers contributed more than two-thirds of the economic activity in 2020. Brooks et al. (2020) and McLaughlin et al. (2022) identified various psychological consequences that could arise from working remotely and being isolated in a specific place. They noted that working remotely could cause stress and lead to feelings of boredom, frustration, and anger among remote workers. In short, the COVID-19 pandemic caused a significant increase in remote work, leading to reduced social engagement among workers. As remote workers became more isolated, they may have relied on self-talk as a means of maintaining their mental wellness and regulating their emotions. This connection between increased remote work and the potential increase in self-talk among remote workers highlighted the crucial role of inner speech in facilitating cognitive processes, in line with Geurts' (2017) study's significance of inner speech as a tool for enhancing mental wellness. This connection justified the need for further investigation into the functions of inner speech/self-talk.

The American Psychiatric Association (2021) reported that more than one third of Americans believed that the coronavirus had a painful impact on their mental wellness. Abbott (2021), Brooks et al. (2020), Li and Wang (2020), McLaughlin et al. (2022) and Murthy (2021) stated that researchers had been investigating how lockdowns affected mental wellness and if isolation caused by lockdowns could take a toll on people's mental wellness with added stress. These researchers had studied the decline in mental wellness during and after the pandemic. This

study shared the same concern about mental well-being and the awareness devoted to understanding the connection between inner speech and mental wellness because inner speech and self-talk is linked to a person's thoughts and emotions. The functions of inner speech and self-talk could have influenced how people felt and behaved, which could have had a significant impact on their mental wellness (Alderson-Day & Fernyhough, 2015; Brinthaupt, 2019; Geva & Warburton, 2019). The COVID-19 pandemic caused significant socio-economic, political, and psycho-social impacts. Banerjee and Rai (2020), Bloom (2020), and Brooks et al. (2020) indicated that remote work would undoubtedly be a part of the worldwide post-COVID economy. From their studies, the increase of remote work and possibly social isolation could cause chronic loneliness and boredom for people. The COVID-19 pandemic accelerated the need to study the use and impact of inner thoughts and mind wandering in both conscious and subconscious states of mind during the new normal and postpandemic period (Bainbridge & Dale, 2023). This study explored the connection between increased remote work and the potential increase in self-talk among remote workers because of the isolation related to the COVID-related closures. Therefore, it was important to know that, even if adult remote workers had fewer social relationships, having a few high-quality relationships with colleagues or peers, using inner speech/self-talk as a self-help tool could help them feel more connected and less lonely (Gates et al., 2023; Venero et al., 2022). The study was important as Verhaeghen and Mirabito (2021) suggested that inner speech and self-talk could be used to improve mental wellness in the areas of self-fulfillment and self-regulation.

### **Definition of Key Terms**

Key terms were referenced throughout this study in accordance with the following definitions:

**Auditory verbal hallucinations.** AVH was operationally applied in this study as the condition of proper use and acceptance of inner speech that inner speech monitoring deficit might result in AVH (Perrone-Bertolotti et al., 2014).

**Inner speech.** This speech is people's ability to talk to themselves in silence; inner speech is one of the most universal phenomena of everyday experience (Geva & Warburton, 2019).

**Inner Speech and Self-Talk.** This principal investigator was using "inner speech and self-talk" throughout this paper, and this term includes such practices as inner speech on its own, self-talk on its own, inner speaking, egocentric speech, private speech, self-statements, phonological loop, internal dialogue, self-directed, and verbal thought (Alderson-Day & Fernyhough, 2015; Geva & Warburton, 2019).

**Law of attraction theory.** This theory was operationally applied as manifestation that something is put into one's physical reality through thought, feelings, and beliefs (Goodman, 2022).

**Lucid dreaming.** This dreaming is the process of being aware that one is dreaming while dreaming (Vallat & Ruby, 2019).

**Nevada Inner Experience Questionnaire (NIEQ).** This questionnaire was used to estimate the frequency of the inner speech and self-talk phenomena (Heavey et al., 2019).

**Phonological loop.** This loop refers to the auditory–phonological component of inner speech, which represents both the sound of an utterance and its associated semantic content (Fernyhough, 2016).

**Piagetian inspiration.** Piaget's theory on egocentric speech and private speech typically emerges in early childhood with the development of expressive language skills (Alderson-Day &

Fernyhough, 2015; Flavell, 2020; Helmore, 2014; Huang, 2021; Piaget, 1964, 2006; Rabindran, 2020).

**Pristine experience.** This experience is a phenomenon that occurs and is directly apprehended by people in their everyday environment (Hurlburt et al., 2022).

**Remote workers.** These workers are employees or self-employed individuals who perform their duties outside the traditional workplace, typically due to unexpected circumstances like pandemics, emergencies, or severe weather conditions (Government of Canada, 2022, December 15).

**Self-efficacy.** This efficacy was defined as people's belief in their ability to succeed; it can shape how they think, act, and feel (MacCormick, 2021).

**Self-talk.** This type of talk is people's ability to talk to themselves aloud and/or in silence (Alderson-Day & Fernyhough 2015).

### **Statement of the Problem**

The problem to be studied was the awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers. When adult remote workers did not have any colleagues to talk to in-person, Gates et al. (2023) and Venero et al. (2022) suggested that the experience of loneliness and disconnection among adult remote workers was not solely dependent on the number of social relationships they had, but also on the quality of those relationships. In a traditional workplace setting, employees had in-person access to colleagues, which provided opportunities for social interaction and the development of social relationships. However, when adult remote workers did not have access to in-person interactions with colleagues, the quality of their social relationships became more important. This meant that even if they had fewer social relationships, having a few high-quality relationships with colleagues or

peers could help them feel more connected and less lonely (Gates et al., 2023; Venero et al., 2022). Moreover, the years since the beginning of the COVID-19 pandemic in early 2020 had seen a decrease in mental wellness (Abbott, 2021). Banerjee and Rai (2020) stated that loneliness was associated with negative feelings, but its cousin was solitude which could be a positive experience that brings peace and tranquility. Inner speech and self-talk was an innate ability that people could use to enhance their experience of solitude, consistent with Vygotsky's (1934/1987) theory of cognitive development, in which Vygotsky posited that people naturally focus on individual aspects of their environments and could learn to enjoy their own existence (Borghi & Fernyhough, 2022; Huang, 2021; van der Veer & Zavershneva, 2018). This could raise the awareness, understanding, and acceptance of using inner speech and self-talk among adult remote workers.

Geurts (2017) explained the distinctiveness of the functions of inner speech, which could be used in "Promises (commissives), statements (constatives), and questions and orders (directives)" (p. 284). Researchers such as Gates et al. (2023), Rovetta (2023), Hurlburt et al. (2022), Venero et al. (2022), Verhaeghen and Mirabito (2021), Meagher and Cheadle (2020), Heavey et al. (2019), and Geurts (2017) had contributed to the understanding of the significance and potential functions of inner speech and self-talk in relation to mental wellness, self-fulfillment, self-regulation, social interactions, and cognitive processes. By incorporating the studies of Gates et al. (2023), Rovetta (2023), Hurlburt et al. (2022), Venero et al. (2022), Verhaeghen and Mirabito (2021), Meagher and Cheadle (2020), Heavey et al. (2019), and Geurts (2017), these journals supported the need for further investigation into the awareness, understanding, and acceptance of inner speech and self-talk as a self-help tool among adult remote workers. Through purposeful sampling and semistructured interviews, this principal

investigator aimed to analyze the participants' descriptions of their experiences with inner speech and self-talk as tools to enhance task performance, memorization, communication, self-fulfillment, and self-regulation in their remote work environment and home environment.

This study aimed to explore the awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers. By investigating the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk, the principal investigator gained a better understanding of this phenomenon. Verhaeghen and Mirabito (2021) suggested that inner speech and self-talk could be used to improve mental wellness in the areas of self-fulfillment and self-regulation. Meagher and Cheadle (2020) noted that when people worked remotely and were attached to their home, their social interactions were naturally reduced, which could lead to feelings of isolation and distress, influenced by changes in their daily lives such as the work environment (Abbott, 2021; McLaughlin et al., 2022). The habitual use of inner speech and self-talk among adult remote workers could function as a self-help tool (Verhaeghen & Mirabito, 2021). According to Heavey et al. (2019) and Hurlburt et al. (2022), the functions of inner speech and self-talk were highly regarded and not dismissed by individuals as insignificant or socially inappropriate behaviors. Therefore, it was important to explore the crucial role of inner speech in facilitating cognitive processes, with the goal of understanding the level of positivity and acceptance present in adults' inner speech and self-talk. This perspective aligned with Geurts' (2017) study, which explained the significance of inner speech as a self-help tool for maintaining well-being, thereby justifying the need for further investigation into its functions. After conducting semistructured interviews with adult remote workers and analyzing their narratives, this study sought to determine whether inner speech and self-talk were utilized as a self-help tool, particularly in areas such as enhanced communication,

socialization, better choice of words, self-growth, self-motivation, self-regulations, and time management. By incorporating these potential links between inner speech and self-talk used as a self-help tool, this study addressed the problem of the awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers.

The COVID-19 pandemic had caused a significant increase in remote work, leading to reduced social engagement among workers (Banerjee & Rai, 2020; Bloom, 2020; Brooks et al., 2020; Cruz, 2020; Murthy, 2021). Remote workers were more isolated; therefore, they might have relied on inner speech and self-talk as a means of maintaining their well-being and regulating their emotions in a broad context (Banerjee & Rai, 2020; Brinthaupt, 2019; Gade & Paelecke, 2019). This connection between increased remote work and the potential increase in inner speech and self-talk among remote workers highlighted the significance of this problem to be studied.

### **Purpose of the Study**

The purpose of this qualitative-phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. At this stage in the research, the definition of inner speech and self-talk encompasses various terms such as inner speech on its own, self-talk on its own, inner speaking, egocentric speech, private speech, self-statements, phonological loop, internal dialogue, self-directed, and/or verbal thought (Alderson-Day & Fernyhough, 2015; Geva & Warburton, 2019). The definition of remote workers is employees or self-employed individuals who perform their duties outside the traditional workplace, typically due to unexpected circumstances like pandemics, emergencies, or severe weather conditions (Government of Canada, 2022, December 15).



## Research Questions and Design

This qualitative phenomenological study explored the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. Two broad and overarching research questions were designed to guide the study's overall direction. Merriam and Tisdell (2016) described qualitative research, formerly known as “qualitative inquiry,” as a research approach that explores people's subjective experiences in-depth. With this study design, which focused on exploring the participants' lived experiences and perspectives related to inner speech and self-talk, the following two research questions were established:

**Research Question 1:** What are the perceptions and experiences of adult remote workers regarding inner speech and self-talk in relation to their functions and use?

**Research Question 2:** How can inner speech and self-talk be used as a self-help tool in a remote work environment?

In summary, this research design employed a qualitative phenomenological approach to gain a deep understanding of the use of inner speech and self-talk from 10 LinkedIn members who identified themselves as remote workers. Through purposeful sampling, semistructured interviews, member checking, and thematic analysis, the principal investigator aimed to shed light on the significance and applications of inner speech and self-talk in the context of remote work. The research design is detailed in Chapter 3.

## Conceptual and Theoretical Framework

This study used Vygotsky's (1934/1987) theory of inner speech as a conceptual framework. As cited in Alderson-Day and Fernyhough (2015) and van der Veer and Zavershneva (2018), in Vygotsky's (1934/1987) theory of cognitive development the theorist posited that inner speech is an innate ability that is developed over time. This principal investigator believed

that understanding how this ability developed over the lifespan was crucial to understanding fully its subjective qualities and functional characteristics (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; Geurts, 2017). By examining the theoretical roots of inner speech and self-talk, including Piaget's (1964, 2006) focus on social aspects (Alderson-Day & Fernyhough, 2015; Flavell, 2020; Helmore, 2014; Huang, 2021; Piaget, 1964, 2006; Rabindran, 2020), and Vygotsky's (1934/1987) focus on individual aspects of learning (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; van der Veer & Zavershneva, 2018; Vygotsky, (1934/1987), this principal investigator has constructed this conceptual framework. The study focused on the remote workers' experiences with inner speech and self-talk. By delving into the functionality and increased recognition of inner speech and self-talk experiences, the study investigated the extent of positivity and acceptance present in adults' inner speech and self-talk. The review of the relevant literature for the existing theories, empirical data, and findings on inner speech was directed by Vygotskian inspiration by which Vygotsky defended the concept that inner speech was the activity of the main functions of speech acts (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; van der Veer & Zavershneva, 2018; Vygotsky, 1934/1987).

Morin et al. (2015) assumed that people had been intrigued by their own inner mental experiences since the time they first became aware of them. To measure inner speech, Chella et al. (2020) used self-report scales, thought sampling, and listing techniques as well as articulatory suppression and private speech recordings. Morin et al. (2018) stated that self-regulation (e.g., planning, and problem solving), language functions (e.g., writing and reading), memorization (e.g., remembering the goals of action, task-switching performances), theory of mind (e.g., rehearsing person-to-person encounters), and self-awareness were crucial functions of inner

speech and self-talk. Geva and Warburton (2019) supported Levesque's (2018) perspective on the cognitive activities involved in inner speech function. Although their definition was narrow, their study provided a sufficient conceptual framework for the subsequent literature reviews in this study. Overall, this study used Vygotsky's (1934/1987) theory of inner speech (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; van der Veer & Zavershneva, 2018; Vygotsky, 1934/1987), and Piaget's (1964, 2006) theory of inner speech (Alderson-Day & Fernyhough, 2015; Geurts, 2017; Helmore, 2014; Piaget, 1964, 2006) to analyze the functions of inner speech in adults.

### **Assumptions, Limitations, and Scope**

The assumption was that inner speech and self-talk was one of the psychological functions that could be considered as a form of self-help action. The motivation theory (Rokach & Goldberg, 2021) encapsulated this assumption, for it was highly relevant in exploring adult remote workers' perceptions and experiences of inner speech and self-talk. The COVID-19 pandemic had negative impacts on "people's physiological needs, safety needs, love and belongingness needs, esteem needs, and the need for self-actualization" (Winston, 2016, p. 142). This principal investigator recognized that some people might feel embarrassed about talking to themselves. It was assumed that all participants responded honestly and were engaging with the study solely for the purpose of participating in this study. Remote workers were working in solitude, without colleagues around them, and this work transformation had created socially isolating experiences. Brinthaup (2019) asserted that social isolation would likely increase the frequency of inner speech and self-talk. Brinthaup made another assumption that people were naturally and constantly looking for ways to maintain both physical and mental wellness.

There were several limitations to this qualitative phenomenological study in the process of exploring the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. The study focused on remote workers who primarily used the English language on the LinkedIn social media platform, which might not account for other cultural, educational, and social values. Moreover, this study occurred post COVID-19 pandemic, and participants might not accurately remember their experiences prior to the pandemic. The study's sample size of 10 participants might limit the generalizability of the findings to other settings or populations.

The scope of this study was narrowed to adult remote workers with ordinary speech and hearing abilities. The 10 participants in this study were recruited from the LinkedIn social media platform, which might not be representative of all adult remote workers. This study focused on the workers' understanding and use of inner speech and self-talk and did not explore the reasons behind it.

### **Rationale and Significance**

The COVID-19 pandemic and the subsequent new normal in which the changes in societal and individual behaviors, routines, and expectations that have emerged as a result of the COVID-19 pandemic. These changes have significantly affected people's well-being (Sakan et al., 2020; Wanberg et al., 2020). According to Sakan et al. (2020) and Wanberg et al. (2020)' study, the changes in work and social environments may have led to increased feelings of isolation and disconnection, making it more difficult for people to maintain their well-being. This study aimed to address the problem of the awareness, understanding and acceptance of inner speech and self-talk by exploring the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk as a self-help tool in their remote work

environment. By examining how inner speech and self-talk was used in this context, this study could contribute to the development of effective strategies for improving well-being in the new normal where employers provide their employees with flexibility in both working hours and work locations, adapting to the evolving post-COVID circumstances. Although healthcare services have always been important, the multiple waves of COVID-19 altered people's day-to-day lives, forcing many industries to change the way they conduct business and to reorganize their workforce (Filip et al., 2022; Statistics Canada, 2021). According to Statistic Canada's Labour Force Survey (LFS), there was a 26-percentage point increase in remote work from April 2020 to June 2021, compared to the approximately 4% of employees who worked from home in 2016, resulting in a total of 30% of employees aged 15 to 64 who engaged in remote work from April 2020 to June 2021 (Statistics Canada, 2021). Social isolating experiences could potentially cause an increase in the frequency of inner speech and self-talk (Brinthaup, 2019). Therefore, choosing adult remote workers to participate in this study offered a solid rationale for conducting this study. Statistics Canada sketched an in-depth profile of workers and families who worked from home from April 2020 to June 2021. The collected data on the Labour Force Survey (LFS) released by Statistics Canada contributed to discussions regarding the well-being of remote workers, as working from home was a relatively new experience for employees in various industries, encompassing both private and public sectors, across different regions and provinces in Canada (Statistics Canada, 2021). Maintaining the well-being of remote workers was a significant concern for many businesses and their employees in all countries with comparable data reporting a noticeable increase in remote work during the COVID-19 pandemic (Organisation for Economic Co-operation and Development [OECD], 2021). For this study, 10 adult remote workers were recruited who voluntarily chose to participate in the interviews. The

purpose of this qualitative, phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk.

### **Summary**

In summary, this chapter discussed that inner speech and self-talk is an innate ability as highlighted in Geurts' (2017) study. The COVID-19 pandemic led to a significant increase in remote work, which might have caused stress and isolation among workers (Abbott, 2021; Brooks et al., 2020; Li & Wang, 2020; McLaughlin et al., 2022; & Murthy, 2021). Taken together, these findings suggested that remote workers could rely on inner speech and self-talk as a means of maintaining their well-being, highlighting the need for further investigation into the functions of inner speech and self-talk (Abbott, 2021; Brooks et al., 2020; Li & Wang, 2020; McLaughlin et al., 2022; & Murthy, 2021). Researchers such as Abbott (2021), Brooks et al. (2020), Li and Wang (2020), McLaughlin et al. (2022), and Murthy (2021) raised concerns about added stress caused by social isolation. The problem studied was the awareness, understanding and acceptance of inner speech and self-talk among adult remote workers. The COVID-19 pandemic and subsequent increase in remote work highlighted the need for further investigation into the functions and impact of inner speech and self-talk according to work-related psychosocial factors and mental wellness.

In this study, this principal investigator used a qualitative phenomenological design to explore the participants' perceptions and experiences related to inner speech and self-talk and their functions and use in the remote work context, and two broad research questions guided this study. The first research question was used to investigate the participants' perceptions and experiences related to inner speech and self-talk and their functions and use in the remote work context. The second research question was used to explore how inner speech and self-talk could

be used as a self-help tool in the remote work environment. By addressing these research questions, this study aimed to contribute to the existing literature on remote work and inner speech and self-talk, providing insights into the potential benefits of using inner speech and self-talk as a self-help tool for adult remote workers.

Based on the conceptual framework for the study, which drawn from Vygotsky's (1934/1987) theory of inner speech and Piaget's (1964, 2006) theory of inner speech, this study assumed that people were constantly looking for ways to maintain their well-being, and that inner speech and self-talk was one such method. This assumption was based on the significant increase in remote work due to the COVID-19 pandemic, potentially leading to a higher frequency of inner speech and self-talk among remote workers. In conclusion, the purpose of this qualitative phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk.

## CHAPTER 2: LITERATURE REVIEW

In this chapter, the focus was on the literature review related to inner speech and self-talk, as this principal investigator highlighted the curiosity surrounding the phenomenon of inner speech and self-talk and their potential be used as a self-help tool among adult remote workers. The literature review encompassed various themes, including the multitude of inner speech and self-talk functions, its historical context, the degree of positivity and acceptance within adult's inner speech and self-talk experiences, and their evolving role in regulating the behavior of adult remote workers in response to the new challenges presented by COVID-19 and the changing dynamics of work. These themes were explored within the conceptual and theoretical framework presented throughout the rest of the chapter. As with most common habits, people talk to other people and people also talk to themselves, as Alderson-Day and Fernyhough (2015) and Geurts (2017) noted. In this literature review, the term "inner speech and self-talk" was used to encompass various synonyms, including inner speech on its own, self-talk on its own, inner experience, egocentric speech, private speech, self-statements, phonological loop, internal dialogue, self-directed, mental verbalization, and/or verbal thought. Through continuous observation of inner speech and self-talk with the presence of utterance, this principal investigator was motivated to conduct a qualitative phenomenological study of inner speech exploring its potential use as a self-help tool among adult remote workers.

Banerjee and Rai (2020), Bloom (2020), Bradbury-Jones and Isham (2020), and Brooks et al. (2020) discussed the significant socio-economic, political, and psycho-social impact of the COVID-19 pandemic and the potential effects of remote workers undoubtedly continued to play a role in the post-COVID economy. These researchers noted in their studies that remote work could lead to social isolation, loneliness, and boredom, which could negatively affect their well-



being. Their studies also noted that the potential findings should be considering any social, political, and economic changes that might occur during or after their study. This literature review highlighted the importance of a qualitative phenomenological study of inner speech and self-talk used as a self-help tool among adult remote workers.

### **Conceptual and Theoretical Framework**

A conceptual framework comprises a researcher's personal interest in the research topic, a review of the literature, and a theoretical framework (Ravitch & Riggan, 2017). The focus of this study held significant personal interest for this principal investigator, who was driven by a profound thirst for knowledge. Several factors have contributed to this keen interest. Firstly, this principal investigator's extensive experience as a Montessori and TESL teacher that spans 15 years has allowed her to work closely with speech and occupational therapists. This collaboration fostered an intrinsic fascination with linguistics and the social and behavioral sciences, igniting a deep curiosity to explore these fields more comprehensively. Secondly, the COVID-19 pandemic brought about unprecedented challenges, including lockdowns and the shift to remote teaching. These changes significantly affected this principal investigator's personal and professional life, resulting in heightened stress levels. It was during this period of adaptation and coping that the curiosity surrounding inner speech and self-talk grew substantially. This phenomenon became not only noticeable, but also highly relevant in this principal investigator's natural environment. These cumulative experiences, both professional and personal, have fueled the principal investigator's drive to embark on a research journey into the realm of inner speech and self-talk. This study represents not only an academic pursuit, but also a deeply personal exploration into a topic that has directly influenced this principal investigator's life, making it a research endeavor imbued with genuine passion and purpose.

This study used Vygotsky's (1934/1987) theory of inner speech as a conceptual framework. According to Alderson-Day and Fernyhough (2015), Borghi and Fernyhough (2022), and van der Veer and Zavershneva (2018), in Vygotsky's (1934/1987) theory of cognitive development the theorist posits that inner speech is an innate ability that develops over time. The literature review focused on how this innate ability develops over the lifespan, which was crucial to understanding fully its subjective qualities and functional characteristics (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; Geurts, 2017). The conceptual framework was constructed by examining the theoretical roots of inner speech and self-talk, including Piaget's (1964, 2006) focus on social aspects (Alderson-Day & Fernyhough, 2015; Flavell, 2020; Helmore, 2014; Huang, 2021; Piaget, 1964, 2006; Rabindran, 2020), and Vygotsky's (1934/1987) focus on individual aspects of learning (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; van der Veer & Zavershneva, 2018; Vygotsky, 1934/1987). The study focused on inner speech's functions, such as fulfilling basic cognitive needs, linguistic devices, psychological needs, and self-regulations. Geva and Warburton (2019) supported Levesque's (2018) perspective on the cognitive activities involved in inner speech function. In conclusion, this study was informed by the formal theory that inner speech and self-talk play a significant and multifaceted role in the cognitive processes and overall wellbeing of adult remote workers. By incorporating these potential links between inner speech and self-talk that are used as a self-help tool, this principal investigator aimed to address the problem of the awareness, understanding and acceptance of inner speech and self-talk among adult remote workers.

In this study, this principal investigator reviewed the literature on the theme "inner speech and self-talk functions" by investigating the extent of positivity and acceptance present in adults' inner speech and self-talk experiences. The review of relevant literature for existing

theories, empirical data, and findings on inner speech was directed by Vygotskian inspiration, which defended that inner speech is the activity of the main functions of speech acts (Alderson-Day & Fernyhough, 2015; van der Veer & Zavershneva, 2018; Vygotsky, 1934/1987). Borghi & Fernyhough, 2022). Morin et al. (2015) assumed that people had been intrigued by their own inner experiences since they first became aware of them. To measure inner speech, Chella et al. (2020) used self-report scales, thought sampling, and listing techniques, as well as articulatory suppression and private speech recordings. Morin et al. (2018) stated that self-regulation (e.g., planning, and problem solving), language functions (e.g., writing and reading), memorization (e.g., remembering the goals of action, task-switching performances), theory of mind (e.g., rehearsing person-to-person encounters), and self-awareness were crucial functions of inner speech and self-talk.

### **Theoretical Framework**

The exploration of a multitude of inner speech and self-talk functions was rooted in the topical research based on Vygotsky's (1934/1987) theory of inner speech (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; van der Veer & Zavershneva, 2018; Vygotsky, 1934/1987) and Piaget's (1964, 2006) theory of inner speech (Alderson-Day & Fernyhough, 2015; Flavell, 2020; Geurts, 2017; Helmore, 2014; Huang, 2021; Rabindran, 2020; Piaget, 1964, 2006) to analyze the functions of inner speech in adults.

### ***Vygotsky's Theory***

According to Geva and Fernyhough (2019) and Loevenbruck et al. (2018), the history of inner speech could be traced back to Vygotsky's (1934/1987) theory. Vygotsky was a Russian psychologist who studied the psychological development of children. Vygotsky proposed that preschool and early school-aged children use their own words in the form of self-directed overt

and audible speech during the developmental stage of creating inner speech and self-talk. As children develop further, their overt inner speech and self-talk become internalized, and their inner speech and self-talk become entirely covert and inaudible (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; van der Veer & Zavershneva, 2018; Vygotsky, 1934/1987). Research in the past few decades mostly supported Vygotsky's (1934/1987) view of the development and functions of inner speech and self-talk (Geva & Fernyhough, 2019).

### ***Piaget's Theory***

In addition to Vygotsky's (1934/1987) theory, Piaget (1964, 2006), a Swiss biologist and psychologist, observed animal behaviors and also contributed to the history of inner speech and self-talk (Alderson-Day & Fernyhough, 2015; Flavell, 2020; Geurts, 2017; Helmore, 2014). These researchers drew insights from Piaget's (1964, 2006) theory and used his meticulous records of young children's inner speech and self-talk to identify the functions of inner speech, which include attention, reasoning, problem solving, planning, plan execution, and motivation. Piaget (1918) first argued that human beings were agents whose mental actions form a sequence co-extensive with their lives (Piaget, 2006). Helmore (2014) and Geurts (2017) used Piaget's (2006) reference to support their argument. According to Piaget, people are sapient. Piaget later described egocentric speech or private speech, which plays a significant functional role in the self-regulation of cognition and behavior (Alderson-Day & Fernyhough, 2015; Rabindran, 2020). Alderson-Day and Fernyhough (2015) and Rabindran (2020) stated that Piaget (2006) proposed that egocentric speech or private speech typically emerges in early childhood with the development of expressive language skills.

## **Overview of Inner Speech and Self-Talk**

Geva and Warburton (2019) explained that inner speech is a person's innate ability to talk to themselves in their head and is one of the most universal phenomena of everyday experience. The distinction between inner speech and self-talk is that, although self-talk tends to involve motivational activities (e.g., affirmations or goal setting), inner speech tends to involve purely cognitive activities (e.g., problem solving or decision making; Levesque, 2018). Geva and Warburton (2019) supported Levesque's (2018) perspective on the cognitive activities involved in inner speech function. Although their definition was narrow, their study provided a sufficient conceptual framework for the subsequent literature review in this study.

## **Functions of Inner Speech and Self-Talk**

The focus of this qualitative phenomenological study was to explore the functions of inner speech and self-talk, specifically in the context of adult remote workers. The literature review was strengthened by incorporating new and relevant research on inner speech and self-talk, including scientific findings and insights related to the current world situation. This new research added significant academic and scholarly value to this study and contributed to a deeper understanding of the potential use of inner speech as a self-help tool for adult remote workers. In this study, this principal investigator aimed to discover the usage of inner speech and self-talk. Chella et al. (2020) noted that the development of inner speech first became apparent as social speech from one's cultural surroundings, followed by private speech. Many scientists, researchers and writers worldwide made joint efforts in their journals and books to support the discussion of cultural and social values that could affect one's well-being using human motivation theory, love, and social belonging (Rokach & Goldberg, 2021). The COVID-19 pandemic took a toll on people with lockdowns causing additional stress (Abbott, 2021;

McLaughlin et al., 2022). Bradbury-Jones and Isham (2020) as well as the OECD (2021) reported that many people were involuntarily isolated during the COVID-19 pandemic lockdowns because of government-imposed restrictions. Hwang et al. (2020) noted that people were forced to change their lifestyles and adapt to new working terms and conditions. This unprecedented situation raised the concern and urgency for understanding the functions of inner speech and self-talk. The lockdowns and world situations during the COVID-19 pandemic might have influenced the positivity of mental activities such as inner speech and self-talk and mindfulness practice to maintain mental wellness (Hwang et al., 2020).

The literature review helped this principal investigator to understand the functions of inner speech and self-talk, which was one of the most universal phenomena that happens everywhere and every day (Geva & Warburton, 2019). The literature review focused on inner speech's functions as fulfilling basic cognitive needs, linguistic devices, psychological needs, and self-regulations. Much of the literature came from scholarly published sources, which were current within recent years and within the last 10 years. The publications provided this study with a wide variety of information that served as a foundation for historical research and background. Chapter 3 reported the site information and demographics, participants and sampling method, instrumentation and data collection, data analysis, limitations, delimitations, and ethical issues, trustworthiness including creditability, transferability, dependability, or validity, as well as confirmability. The results and findings of the study are presented in Chapter 4, and interpretation and importance of findings and implications as well as recommendations for further study and conclusion of this study are discussed in Chapter 5.

### **Importance of Inner Speech and Self-Talk in Self-Reflection**

Langland-Hassan (2014) stated that inner speech and self-talk are an important aspect of human experience that occurs frequently in people's daily lives. Langland-Hassan used Heavey and Hurlburt's (2018) study in which they reported that inner speech and self-talk occur in 25% of people's waking hours. Hurlburt et al. (2013), Morin (2020) and Rovetta (2023) further emphasized the role of inner speech and self-talk in self-reflection, noting that it was a crucial aspect of describing, defining, and understanding oneself. In fact, Heavey et al. (2019) developed the Nevada Inner Experience Questionnaire (NIEQ) as a tool to measure the frequency of inner speech and self-talk phenomena. The NIEQ questionnaire included five subscales that estimated the frequency of inner speaking, inner seeing, unsymbolized thinking, feelings and sensory awareness, all of which were relevant to this study on adult remote workers' use of inner speech and self-talk (Brinthaupt et al. 2015; Heavey et al., 2019).

Self-reflection is a significant component of inner speech and self-talk, and it involves the introspection of one's thoughts and emotions (Hurlburt et al., 2013; Rovetta, 2023). Through self-reflection, individuals are able to gain insight into their cognitive and emotional processes and to develop a better understanding of their self-identity (Hurlburt et al., 2013; Morin, 2020; Rovetta, 2023). In this context, inner speech and self-talk could be used as a tool for self-reflection, and they could facilitate the examination and exploration of one's thoughts and emotions. Overall, the importance of inner speech and self-talk in self-reflection were recognized in the above-cited research, and the NIEQ questionnaire was developed to measure the frequency of inner speech and self-talk phenomena. The use of inner speech and self-talk in self-reflection could be particularly relevant for adult remote workers, who might experience isolation and reduced social engagement because of their work environment.

## **Auditory Imagery and Inner Speech and Self-Talk**

Gregory (2017) and Loevenbruck et al. (2018), suggested that inner speech and self-talk involves auditory imagery, which is the ability to imagine sounds in one's mind. They argued that this auditory imagery could serve as a tool for describing inner speech, which combined language-like, sensory image-like, and expression-and-thought-like qualities. Geurts (2017) argued that inner speech and self-talk have multiple functions, including self-commitment, self-regulation, and self-fulfillment (Gregory, 2020). Gregory (2020) noted that, although typical communication involves at least two people (sender and receiver), inner speech and self-talk are distinct in that the sender and receiver are the same individual. This unique aspect of inner speech and self-talk makes them a valuable tool for self-reflection and personal growth. Given the importance of inner speech and self-talk in self-regulation and self-fulfillment, it was crucial to understand how remote workers used this tool in their daily lives.

## **Observable Inner Speech and Self-Talk**

### ***Characteristics and Measurement***

Hurlburt et al. (2022) argued that, despite the widespread belief that people have direct access to their inner speech and self-talk experiences, psychological science did not invest in high-fidelity investigations of these experiences. Understanding the frequency and characteristics of inner speech and self-talk was crucial for improving the understanding of how people regulate their thoughts and emotions in daily life (Hurlburt et al., 2022). Morin and Racy (2022) noted that the questionnaires were the primary tool used to measure inner speech and self-talk. In their study, the participants were asked to self-report their experiences and endorse self-statements using a frequency scale. The self-talk scale (STS) was often used to measure the main function of inner speech, which was self-regulation (Brinthaupt et al., 2019; Morin & Racy, 2022).



### ***Visual Images of Inner Speech and Self-Talk***

Although this study did not have a specific research question related to visual imagery, Caracciolo and Hurlburt (2016) offered additional information as a point of comparison or contrast to the auditory imagery that Gregory (2017) and Loevenbruck et al. (2018) discussed. Caracciolo and Hurlburt (2016) explained that, when people read a novel, they can hear the voice of the narrator as if the narrator were speaking to them in their own heads, and this auditory imagery is often accompanied by visual images of scenes depicted in the text. They argued that these visual images demonstrate how inner speech and self-talk could be evidenced through visualization in both conscious and subconscious states of mind. To connect the concept of visual imagery to the research questions, it might be valuable to explore whether adult remote workers used visual imagery in their inner speech and self-talk when reading books or novels. Understanding the perceptions and experiences of adult remote workers regarding their use of visual imagery in inner speech and self-talk in relation to the functions and the use could be crucial for improving the exploration in understanding how inner speech and self-talk could be used as a self-help tool in a remote work environment. Incorporating the idea of visual imagery into the research could provide a more comprehensive understanding of the potential ways in which inner speech and self-talk operate among remote workers, and how they could be used.

### ***Law of Attraction Theory and Mental Imagery Theory***

Goodman's (2022) discussion on the law of attraction theory and manifestation could be linked to this study, which explored the potential benefits of using inner speech and self-talk as a self-help tool in the remote work environment. According to Goodman (2022), the law of attraction theory suggested that one's thoughts, feelings, and beliefs could be translated into physical reality, potentially resulting in positive changes in well-being. This theory supported the

literature review on inner speech and self-talk, such as Caracciolo and Hurlburt (2016) and Langland-Hassan and Vincente (2018), who explained how people could hear the voice of the narrator as if it were speaking in their own heads. Additionally, Loevenbruck et al. (2018) suggested that inner speech and self-talk could be evidenced through visualization in both conscious and subconscious states of mind, which supported the concept of using visual images of inner speech and self-talk as a sensational imagined speech and an inner perceptual experience. Cohon's (2018) explanation of visual images, using Hume's (1739) mental imagery theory in which he proposed that mental images are created by recombining ideas of things that people experienced through sensory perception, suggesting that people could recombine ideas of things that they had experienced to create mental images (Norton & Norton, 2000). Cohon's (2018) explanation of visual images, as well as Macpherson's (2019) missing shade of blue experiment, contributed to a better understanding of how visual images of inner speech and self-talk could be used as a self-help tool for enhancing remote workers' well-being in a remote work environment.

### ***Lucid Dreaming***

Lucid dreaming and inner speech and self-talk were both techniques that involved a high degree of control over one's inner experiences (Macpherson, 2019; Vallat & Ruby, 2019). Their studies indicated that lucid dreaming is a technique where individuals intentionally induce a state of consciousness during which they are aware that they are dreaming and can influence or even direct the content of their dream. Inner speech and self-talk, on the other hand, are a cognitive process of talking to oneself internally in a deliberate and often conscious manner (Macpherson, 2019; Vallat & Ruby, 2019). Macpherson (2019) and Vallat and Ruby (2019) highlighted the similarities between these two techniques. They suggested that lucid dreaming involved a high

degree of imagination and willpower, just as a component of inner speech and self-talk's functions.

Loevenbruck et al. (2018) argued that both techniques might be used to regulate one's emotions and enhance self-awareness. Understanding the relationship between lucid dreaming and inner speech and self-talk might be beneficial for individuals who were seeking to improve their self-regulation. By developing new strategies that incorporated elements of both techniques, individuals might be able to gain greater control over their inner experiences. For example, by combining techniques such as visualization and inner speech and self-talk, individuals might be able to better regulate their emotions and manage stress (Loevenbruck et al., 2018).

### **Usage and Acceptance of Inner Speech Functions**

Geva and Warburton (2019) described inner speech as the human auditory ability to create an internal representation of words without any overt sounds or articulation. Loevenbruck et al. (2018), and Geva and Warburton (2019) noted that inner speech and self-talk were a self-directed language that functioned as silent self-talk without audible articulation and was related to cognitive control, self-regulation, and mental well-being. Although typical language users could use inner speech and self-talk competently at a high level for cognitive control, individuals with aphasia might have difficulties producing inner speech, affecting their proficiency level (Fama & Turkeltaub, 2020). It was worth noting that Geva and Warburton's study paid little attention to inner speech impairments in adult disorders that affected language function, such as aphasia. In contrast, Gade and Paelecke (2019) explored the use and acceptance of inner speech functions and stated that typical language users could use inner speech and self-talk competently in a controlled manner at a higher proficient level. They emphasized that inner speech is a form of cognitive control related to self-regulation and well-being.

### **Performance and Proficiency Levels of Inner Speech and Self-Talk Innate Ability**

One of the distinct features of Geurts' (2017) research was the use of common daily tasks (e.g., checking the weather or doing household chores), which were classified as social acts. Geurts (2017) argued that these mental tasks were addressed not only as social acts to others, but also to oneself. As Geurts noted, humans live in a world of social and communicative interactions. Geva and Warburton (2019) also discussed the function of inner speech in daily tasks. They argued that although not all daily tasks required inner speech, it could be frequently used as an accelerator to task performance, memorization, communication, self-fulfillment, and self-regulation. This finding aligned with Geurts' (2017) and Geva and Warburton's (2019) definitions that the function of inner speech is cognitive, and that the mechanism is linguistic.

#### **Inner Speech and Daily Tasks**

Geurts (2017) provided examples of how people used inner speech and self-talk in their daily lives (e.g., asking themselves whether it would rain tomorrow or telling themselves to do the dishes and rewarding themselves with a promise of an espresso when the task would be finished). These daily activities of asking, telling, promising, and reminding were considered as social acts because they were cognitive functions that worked as a catalyst for thinking, decision making, and self-motivating both for oneself and others. Chella et al. (2020) and Loevenbruck et al. (2018) described how the experience of inner speech involved a dialogue within oneself, which was important for introspecting one's mental experiences. They explained that inner speech played a crucial role in human behavior, including self-restructuring, self-regulation, and redirecting attentional resources. In other words, inner speech and self-talk are an important self-help tool for examining and regulating human thoughts, feelings, and behaviors. Perrone-Bertolotti et al. (2014) pointed out that although inner speech and self-talk are used as the

temporary storage of information in short-term memory (phonological loop), excessive negative inner speech and self-talk could disrupt cognitive performance. Their study supported Geva and Warburton's (2019) clinical neuropsychology journals, which indicated that people have different performance and proficiency levels in their ability to produce inner speech, and that excessive negative inner speech and self-talk posed a risk for depression and anxiety disorders.

### **Inner Speech and Self-Talk Monitoring Deficit and Auditory Verbal Hallucinations**

According to Perrone-Bertolotti et al. (2014) and Loevenbruck et al. (2018), proper use and acceptance of inner speech were crucial, as an inner speech monitoring deficit might lead to AVH. Inner speech and self-talk is crucial in thinking, task performance, memorization, communication, self-fulfillment, and self-regulation. Perrone-Bertolotti et al. (2014), Loevenbruck et al. (2018) and Rovetta (2023) stated that it had a positive influence on many daily and routine cognitive tasks, including planning, problem solving, self-motivating, reading, writing, calculating and autobiographical memory; however, if people perceived their inner speech and self-talk as external voices instead of internal voices, "the prevalence of auditory verbal hallucinations (AVHs) have been documented across the lifespan in varied contexts, and with a range of potential long-term outcomes" (de Leede-Smith & Barkus, 2013, p. 1).

### **Inner Speech and Self-Talk Used as an Accelerator to Task Performance**

Geurts (2017) supported this principal investigator's observation that inner speech and self-talk never completely disappear. Geurts' literature helped this principal investigator to understand the comparison and contrast of Piaget (1964, 2006) and Vygotsky (1934/1987) to conclude that overt self-talk never goes away entirely. This human behavior remains in active use throughout the lifespan: infancy, early childhood, adolescence, adulthood, and senior years. Although the individual might notice or not notice it, people rarely pay attention to its content,

use, and engagement in a variety of psychological functions. Alderson-Day and Fernyhough (2015) stated that recent empirical research well-defended Vygotsky's (1934/1987) claims about inner speech and self-talk, which Vygotsky identified as a resource supporting executive function that could be used as task performance in adulthood. Self-vocalizations were correlated with task performance and could be classified as task-relevant and irrelevant categories (Alderson-Day & Fernyhough, 2015). They stated that adults continue to use inner speech and self-talk in switching between different responses and rules, as well as with different tasks in a similar fashion as in their childhood.

### **Inner Speech and Self-Talk Used as an Accelerator to Memorization**

Alderson-Day and Fernyhough (2015) stated that "inner speech in adulthood has largely been studied as a cognitive tool supporting memory" (p. 937). Geva and Warburton (2019) argued that task performance could be influenced by working memory abilities, not merely inner speech abilities. From their data collection results, Geva and Warburton (2019) suggested that inner speech and self-talk played a key role in memory. Alderson Day and Fernyhough (2015) affirmed that rehearsal and working memory were among the most influential theoretical perspectives on inner speech, with working memory being how people retained information throughout the course of a complex task (e.g., when people were driving to a new location, they needed to keep in mind both directions and positions while navigating unfamiliar areas). Gregory (2017) used an example to explain the use of inner speech and self-talk in memorization to remember a phone number when people could not immediately jot down the phone number or record it on their cellular phone. Gregory explained that people used inner speech and self-talk for this kind of perceptual information, and that the self-generated auditory imagery was retained for a second or two.

Fama and Turkeltaub (2020) studied the well-known work of Baddeley and Hitch (1974) and explained that one of the functions of inner speech and self-talk was working memory. Alderson-Day and Fernyhough (2015) stated that inner speech and self-talk are associated with a wide range of mental tasks, including logical reasoning, reading, and executive functioning abilities such as planning, decision making, and task switching. Perrone-Bertolotti et al. (2014), Loevenbruck et al. (2018) and Rovetta (2023) suggested that inner speech and self-talk could be recruited to implement verbally based self-instruction. Geva and Warburton (2019) explained that the working memory model (Baddeley, 2012) was one of the cognitive models that provided evidence to support one of the functions of inner speech and self-talk, which was memorization. They further explained that memorization included the phonological loop, which was a component of inner speech and self-talk that held verbal information for a short period of time. Grandchamp et al. (2019) and Loevenbruck et al. (2018) studied the intentionality dimension of inner speech within a hierarchical predictive control framework, where they stated that people sometimes purposely engaged in inner speech to rehearse material in their short-term memory. Cowan (2016) and Schacter et al. (2012) introduced the concept of active verbalization, which could help with memorization activities, suggesting that inner speech could be used as an accelerator to task performance, memorization, communication, and self-fulfillments (Loevenbruck et al., 2018).

### *Theory of Intention*

Geurt (2017) explained the continuous use of inner speech and self-talk during adulthood through the theory of intention, which involves “the promises (commissives), statements (constatives), and questions and orders (directives)” (p. 284). The theory of intention ties well with the distinctiveness of inner speech and self-talk and its connection to beliefs and

persistence. For those people who habitually used inner speech to rehearse their tasks silently, Gade and Paelecke's findings suggested that inner speech and self-talk could be used as an accelerator to task performance; moreover, task performance monitoring could be beneficial for conflict resolution (Gade & Paelecke, 2019). Setiya (2018) explained the concept of intention, which aligned well with the idea of multitasking. Alderson-Day and Fernyhough (2015) provided further insights into multitasking, according to experiments that Emerson and Miyake (2003) conducted. Alderson-Day and Fernyhough (2015) stated that inner speech and self-talk facilitates task performance, especially when it pertains to memory by acting as a mnemonic cue to assist people in completing a task. Gregory (2017) gave an example of people performing their aerobics routine in the same manner as this principal investigator's inner speech utterances during her aerobic classes: "step up, step down, step left, step right, jump." This principal investigator defends the relationship between inner speech and self-talk and the theory of intention, for Gregory's examples clearly illustrated the seamless integration of inner speech and self-talk into task performance.

### **Inner Speech and Self-Talk Used as an Accelerator to Self-Reflection, Awareness, and Efficacy**

The use of inner speech and self-talk could accelerate self-reflection, awareness, and efficacy, which were crucial for maintaining mental wellness (Morin et al., 2018). Morin (2019) highlighted the relationship between self-reflection and inner speech and self-talk, noting that inner speech and self-talk play a significant role in defining, describing, and understanding oneself. Morin (2019) discussed the distinction between two types of self-reflections and self-awareness. According to Morin, self-reflection was healthy, genuine curiosity about oneself, associated with positive psychological outcome such as self-regulation and self-improvement.



This study focused on the self-reflection function of inner speech, which was associated with mindfulness. In line with Morin's terminology, self-reflection had a broad meaning in this section, including self-knowledge, self-regulation, self-awareness, self-efficacy. Morin argued that inner speech played a causal role in the implementation and maintenance of all these self-related inner speech functions. Morin discussed three possible causal directions between inner speech and self-reflection. The first direction was that inner speech led to, increased, produced, and sustained self-reflection, which included self-evaluation, self-knowledge, and self-regulation. The second direction was that self-reflection induced or activated inner speech and self-talk. The third direction was that self-reflection and inner speech and self-talk paralleled each other with constant and rapid back and forth movements between the two activities; Morin noted that these three possible causal directions were not mutually exclusive and that most of the empirical evidence and theoretical ideas in Moran's study pertained to the first causal direction, that inner speech and self-talk could be used as an accelerator to self-reflection.

Morin (2019) further emphasized that individuals could use inner speech and self-talk to re-address and re-evaluate appraisals from others. Morin argued that, when people made observations and inferences about an individual's thoughts, feelings, and behaviors, they might influence the individual's inner speech and self-talk. Burnett (1996, as cited in Morin, 2019), conducted research that showed that children who perceive positive remarks from significant others tend to have higher positive self-talk and lower negative self-talk. In contrast, children who perceive negative remarks from significant others tend to have higher negative self-talk and lower positive self-talk. In line with Morin's (2019), Bandura's (1977) research on self-efficacy also supported the importance of inner speech and self-talk in shaping people's beliefs about their ability to succeed, which in turn affected their thoughts, actions, and emotions (Greenberg

et al, 2021; MacCormick, 2021). Moreover, Gregory's (2018) study further emphasized the positive impacts of self-reflection on mental wellness, using inner speech and self-talk, particularly cognitive, aesthetic, self-fulfillment, self-regulation, and transcendence needs. Gregory argued that the use of inner speech and self-talk could increase self-efficacy if used positively but could decrease it if used negatively. Gregory suggested that inner speech and self-talk could be a source of knowledge about one's beliefs and that sincere assertion played a significant role in achieving self-awareness and self-influence.

In line with Gregory's (2018) theory, developing high self-efficacy was crucial during and after the pandemic. With added stress because of economic downturns and the need to maintain a healthy lifestyle both physically and mentally, people must develop routine habits and perform tasks, and must achieve personal goals in a natural environment. Inner speech and self-talk could be an effective cognitive strategy for achieving these goals by using mental imagery, beliefs, and assumptions. Morin's (2019) and Gregory's (2018) studies involved in the functions of inner speech and self-talk supported Piaget's (1964, 2006) perspectives in self-efficacy (Alderson-Day & Fernyhough, 2015; Flavell, 2020).

### **Inner Speech and Self-Talk Used as an Accelerator to Self-Commitment and Communication**

Geurts (2017) explained the theory of communication, stating that the same linguistic devices could be used to communicate with oneself and others. Geurts argued that self-talk was an activity within people's minds and that social talk was interpersonal communication. According to him, the mind was divided into compartments, which he called "modules," "systems," "selves," "personae." This was a different view of human communication that distinguishes interpersonal and intrapersonal communication. This form of self-communication

is a commitment-based approach to speech acts, which can help motivate people to act with intentions. Little (2014) recognized that inner speech and self-talk served the function of self-communication and self-commitment. Greenberg et al., (2021) supported this view, stating that self-communication and self-commitment were part of everyday life in the field of psychology. Greenberg et al. also noted that people modify their thoughts and behaviors to align them with their own standards and to set goals for the future.

Grandchamp et al. (2019) proposed the ConDialInt Model (for Condensation-Dialogality-Intentionality), which was a neurocognitive model that supported Perrone-Bertolotti et al. (2014), who claimed that inner speech and self-talk were used as the temporary storage of information in short-term memory (phonological loop). The ConDialInt model was focused on intentional inner speech production, which could be used as an accelerator in communication, self-fulfillment, and self-regulation. Geurts (2017) argued that the main purpose of communication was to establish commitment, which could lead to becoming a better person by self-imposing constraints on behavior that could affect future actions. Gregory (2017) provided examples of inner speech utterances that took the form of exhortations, imperatives, or addresses directed to oneself (e.g., “Just two more kilometers” or “Jerry, you can do it!”), and exclamation-style utterances in inner speech and self-talk like “What a pain!” (p. 18, 19). Gregory (2017) supported Geurts’ (2017) claim that inner speech and self-talk allow people to think ahead, and Grandchamp’s (2019) explanation of intentional inner speech production could be used as a self-help tool to facilitate deliberate decision making.

This section of the study focused on the investigation of using inner speech as a private commitment for self-regulation and self-motivation. Geurts (2017) provided examples of private commitment (e.g., promising oneself to wake up in a good mood or giving oneself a big smile

when checking in the mirror to start the day). Geurts' (2017) study explored whether self-commitment could function as self-imposed constraints on future actions. This principal investigator argues that positive inner speech and self-talk could bring positive outcomes because of the committed action with oneself to reach self-determined goals, enabling coordination and self-regulation. Geurts concluded that extensive cancellation of private commitment could distort people's planning processes. Grandchamp et al. (2019) found that one dimension of inner speech was intentionality, where individuals might deliberately engage in willful or intentional inner speech and self-talk. However, individuals might also use inner speech and self-talk unintentionally, referred to as verbal mind wandering or spontaneous inner speech and self-talk, which was often weaker than that of intentional inner speech and self-talk. Grandchamp et al. suggested that there were different types of inner speech that varied in functionality and level of intentionality and clarity.

### **Inner Speech and Self-Talk Used as an Accelerator to Self-Regulation and Verbal Self-Guidance**

Dolcos and Albarracin (2014) and Morin et al. (2018) found that the most documented function of inner speech was self-regulation and verbal self-guidance, which originated from Vygotsky's (1934/1987) perspective. Brinthaupt et al. (2015) explained that the usage of inner speech and self-talk was related to a wide variety of self-regulation. Setiya (2018) applied the intention theory to support Geurts (2017) in stating that intentions were conduct controlling. Gregory (2017) provided examples of inner speech that are directed towards verbal self-guidance, such as searching for lost keys: "Where did I have them last? Ah, in the kitchen" (p. 17). Gregory also gave an example of making a choice for lunch: "What should I have for

lunch? I had sushi yesterday. I will just have a sandwich” (p. 18). Gregory (2017) explained that making a choice was a form of verbal self-guidance used to solve a certain kind of problem.

Schieman et al. (2022) noted that, during the pandemic, social restrictions reduced various aspects of people’s work and personal lives. Geurts (2017) provided a unique discussion on the content of promise and commitment in inner speech and self-talk. Dolcos and Albarracín (2014), referencing Heavey and Hurlburt (2008), reported that an astonishing 96% of adults engaged in ongoing inner speech, with over 25% of their inner experiences involving covert self-talk. They provided examples such as students preparing for exams, speakers getting ready for presentations, individuals experiencing depression or anxiety, and athletes who frequently engage in self-talk. Dolcos and Albarracín (2014) demonstrated that second-person self-talk, or You-self-talk, strengthened self-regulation and verbal self-guidance. Using inner speech and self-talk could represent the regulatory function of inner speech, suggesting that You-self-talk might be internalized and, over time, evolved into self-motivation. When people exercise, they often use phrases like “You/I can do it!” or “Stay focused!” They asserted that participants in their study believed inner speech and self-talk could boost morale, maintain focus, sustain motivation, and ultimately function as a catalyst to improve performance. They further described how individuals use inner speech and self-talk with the first-person pronoun (I), but they specifically highlighted that people also use inner speech and self-talk in the second person (You), as if conversing with someone else. Their research suggested that employing You-self-talk for self-advice serves as an accelerator for self-regulation and verbal self-guidance in everyday situations. In other words, they posited that You-self-talk resulted in better anagram task performance compared to I-self-talk. Dolcos and Albarracín (2014) demonstrated that second-person self-talk, or You-self-talk, strengthened self-regulation and verbal self-guidance. In their

study, they pointed out that the inner speech and self-talk phenomenon was important in social, cognitive, health and work settings.

### ***Impact of COVID ON Inner Speech and Self-Talk and Social Isolation***

The COVID-19 pandemic had a significant impact on the work environment during the first half of 2020, as people were confined to their homes because of lockdown requirements (Fan & Moen, 2021; Schieman et al., 2022). Studies revealed that adult remote workers experienced a sort of system shock in their work, family, and personal life changes, feeling as though they had been silenced (Abbott, 2021; Banerjee & Rai, 2020; Schieman et al., 2022). Prior to the pandemic, remote work was mostly limited to high-paid, white-collar professionals, who made up only a small fraction of the American workforce; most American workers had little or no exposure to remote work before (Fan & Moen, 2021). According to Covert (2020), inner speech and self-talk also helped them to regulate their work behavior by making demands on themselves. During the COVID-19 pandemic, remote workers had to adjust to unfamiliar ways of working, they had to establish workspaces, routines, self-care, and self-discipline, and balance between work and personal life, and adapt to virtual team interactions and digital technology (Covert, 2020; Fan & Moen, 2021; Schieman et al., 2022), the remote workers needed to set new goals, monitor their work progress without other team members or superiors around them, and make adjustments as needed.

Murthy (2021) suggested that the COVID-19 outbreak might have amplified the prevalence of social detachment and feelings of loneliness. One of the primary functions of inner speech and self-help was personal perspective that could change the mental wellness, attitudes, and emotions regarding how people used inner speech and self-talk as a self-help tool (Dolcos & Albarracin, 2014; Morin et al., 2018). Dolcos and Albarracin (2014) and Morin (2018) indicated

that, when people faced stressful moments, inner speech and self-talk could help in evaluating self-interest, and available resources for coping with challenging situations by using inner speech and self-talk with more positive mindsets. As a result, inner speech and self-talk could have substantial effects on people's thoughts, feelings, and performance. Dolcos and Albarracín (2014) emphasized that the second-person self-talk or You-self-talk, might evoke positive attitudes and emotions, using inner speech and self-talk as an accelerator to influence behavioral intentions and task performance. According to Covert (2020), Fan and Moen (2021), Murthy (2021), and Schieman et al. (2022), even before the pandemic, inner speech and self-talk played a crucial role in regulating human behavior.

Murthy (2021) conducted an Ipsos online survey among 2,010 adults in United States in August 2020, finding that 66% of adults and 75% of young adults Ages 18–34 had reported being socially detached during the pandemic. Murthy stated that individuals who experienced social isolation also expressed feelings of irritation, anxiety, fatigue, or sadness. When people engaged in positive inner speech and self-talk, they could boost their self-esteem and develop a more positive self-image (Little, 2014; Morin, 2019). Their study indicated that the COVID-19 pandemic brought about significant changes to people's daily lives and created new stressors and uncertainties that people must navigate. This principal investigator reviewed the literature review about the theme of the use of inner speech and self-talk and discovered that the use of inner speech to regulate people's behavior likely shifted in response to these new challenges. Therefore, this study used the qualitative phenomenological research method to explore whether the functions of inner speech and self-talk could lead to more confidence, resilience, and greater self-regulation. Loevenbruck et al. (2018) summarized that, using behavioral measurements, it appeared that inner speech and self-talk might be associated with brain activity, and overt and

covert language. Overall, these studies suggested that inner speech could be a powerful tool that people could use to regulate their behavior, emotions, and thoughts, making it a valuable self-help tool. Inner speech and self-talk could help individuals manage stress, set goals, monitor task progress, and develop a positive self-image.

### **Inner Speech and Self-Talk as a Self-Help Tool During Social Isolation**

#### **Inner Speech and Self-Talk as Voluntary and Effortless**

According to Murphy (2021), the COVID-19 pandemic had resulted in the deterioration of people's social experience with more than seven in 10 adults reported that the pandemics made it more difficult for them to connect with friends. Murphy suggested that the COVID-19 pandemic brought about significant changes to people's daily lives and created new stressors and uncertainties that researchers and scientists had to navigate. Gregory (2020) suggested that using inner speech and self-talk as a self-help tool to regulate people's mindsets likely shifted in response to the new challenges. If people had been dealing with lockdown problems and anxiety, understanding, and embracing inner speech and self-talk could be a self-help tool for them to use because inner speech does not depend on any outside stimulus and could be used voluntarily and effortlessly (Gregory, 2020). James (1890, as cited in Hurlburt et al., 2022) stated, "Everyone knows what attention is. It is the taking possession by the mind, in clear and vivid form" (p. 568). If lockdowns triggered more inner speech and self-talk as people needed to solve problems by themselves, the intentional use of inner speech and self-talk could bring positive outcomes to well-being. Banerjee and Rai (2020) noted that inner speech and self-talk is an innate ability that people can use for peace and tranquility, which supported Vygotsky's (1934/1987) perspective that people could simply enjoy their existence by concentrating on individual aspects in their living environment (Huang, 2021). Greenberg et al. (2021) described



how this ability might be important for adult remote workers, who could have their superiors, colleagues, and acquaintances with them such that a person who lived alone could have their inner world populated by internal representations of more than half a dozen people. Furthermore, as Macpherson (2019) explained that people could shift their attention to change how they see things by exploring how remote workers use inner speech and self-talk in their daily lives.

### **Positivity of the Functions of Inner Speech**

Considering the impending lockdowns and deteriorating mental wellness, education on the functions of inner speech was immediately necessary. Brinthaupt (2019) used the *social isolation hypothesis* to explain that socially isolating experiences were associated with increased self-talk. The pandemic lockdowns forced many people to adapt to a new normal lifestyle and engage in the long-forgotten use of inner speech and self-talk (Banerjee & Rai, 2020). This study applied the law of attraction theory (Goodman, 2022) to explain that people could employ positive inner speech and self-talk during and after the COVID-19 pandemic to improve their lives (Greenberg et al., 2021). Throughout the duration of the lockdowns, people could not easily access medical treatments. This principal investigator believes that healthcare professionals could prescribe positivity as a self-help tool for physical and mental wellness.

### **Need to Get Beyond the Screen and Noise**

Perrone-Bertolotti et al. (2014) stated that the benefit of using inner speech was not exclusive to task performance and that inner speech and self-talk played a crucial role in problem solving. Many people were living in an information overloaded digital environment; therefore, embracing inner speech and self-talk and distancing themselves from social life and technological devices and gadgets could be beneficial (Anderson & Rainie, 2018). Anderson and Rainie (2018) suggested that there was a need to get beyond the screen and the noise so that

people should only use relevant and updated information about the coronavirus. Anderson and Rainie (2018) highlighted concerns about the “heavy toll of ‘always on’ technology” (p. 2) and worried about digital dystopia. They pointed out that people’s use of digital technologies influenced their well-being, including their level of stress, performance, attention, and general happiness.

Anderson and Rainie (2018) conducted a nonscientific canvassing of experts and reported that (a) 47% of their respondents predicted that individuals’ well-being would be more helped than harmed by digital life in the next decade, (b) 32% predicted that individuals’ well-being would be more harmed than helped, and (c) 21% predicted there would not be much change in people’s well-being from the way it is now. Although this principal investigator defended the 47% of those respondents who believed digital life in the next decade would help people rather than harm them, it was critical to note that embracing the functions and cultivating the positivity of inner speech and self-talk for self-fulfillment and self-regulation required self-managing quiet time in a disciplined psychological state of mind to achieve more positive outcomes, including restoration of the nervous system, increased energy levels, and reconditioning of cognitive and creative minds. In this way, people could be more adaptive and responsive, and engage in a nonanxious and healthy type of self-regulation without the overstimulation of digital tools and social media.

Understanding and embracing the functions of inner speech and self-talk could enhance people’s wellness in a natural and effortless manner (Anderson & Rainie, 2018; Perrone-Bertolotti et al., 2014). According to Loevenbruck (2014), inner speech and self-talk is a vital function in executive control that assists in working memory, task switching, problem solving

and attentional enhancement. It is an innate ability that intentionally interacts with executive functions in the human brain.

### **Summary**

In this literature review, this principal investigator presented the conceptual and theoretical framework, findings, theories, and descriptors for the inner speech and self-talk phenomenon pointing out that a good deal of research had focused on the importance and various roles of inner speech and self-talk. In the thematic review, this principal investigator explored inner speech and self-talk's functions, usage, and acceptance with a focus on the relevance of inner speech and self-talk prior to COVID-19, during the pandemic, and in the postpandemic period. It highlighted the importance of inner speech and self-talk as a psycholinguistic phenomenon that played a crucial role in problem solving, self-attention, self-fulfillment, self-regulation, and other cognitive processes. The review emphasized the interconnectedness of the three themes and the need to understand and embrace inner speech and self-talk to improve mental wellness, self-fulfillment, and self-regulation. The three themes were the functions of inner speech and self-talk, the use of inner speech and self-talk, and the acceptance of inner speech and self-talk. These themes were interrelated, and one could not fully understand them in isolation.

In the literature review, this principal investigator suggested that inner speech and self-talk had many theoretical roots in the works of Piaget (1964, 2006) and Vygotsky (1934/1987). The COVID-19 pandemic had reduced face-to-face interactions, which led to feelings of loneliness and the need for researchers to conduct more studies to examine the development and encouragement of inner speech and self-talk across various stages of the lifespan. The literature review supported the concept that inner speech and self-talk are an acceptable form of voiceless

verbal thinking that could be used as a self-help tool. The participants in multiple sources of the literature review presented positive outcomes of using inner speech and self-talk (e.g., enhanced communication, socialization, better choice of words, self-growth, self-motivation, self-regulation, and time management). A deeper understanding of inner speech and self-talk could help individuals conceive the most viable solutions for problems and avoid negative consequences during times of crisis such as the COVID-19 pandemic.

In summary, face-to-face communications with family, friends, and colleagues during the COVID-19 pandemic, and the new normal in the postpandemic era, were reduced; therefore, people needed to increase their awareness, understanding, and acceptance of inner speech and self-talk to improve their well-being, self-fulfillment, and self-regulation. This principal investigator acknowledged the problem of the awareness, understanding and acceptance of inner speech and self-talk. Thus, the purpose of this qualitative, phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk.

### CHAPTER 3: METHODOLOGY

The problem studied was the awareness, understanding and acceptance of inner speech and self-talk. Bloom (2020) and Statistics Canada (2021) indicated that remote work became a necessity during the COVID-19 pandemic. This principal investigator felt the urgency to explore the hidden toll of remote work, as adult remote workers might have experienced loneliness and disconnection because of the lack of in-person colleagues (Gates et al., 2023; Venero et al., 2022). According to Langland-Hassan (2020), individuals' introspective access to their own inner speech could provide valuable information about its nature and function which could positively affect people's awareness, understanding, and acceptance of inner speech and self-talk.

The purpose of this qualitative-phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. This principal investigator designed two broad and overarching research questions to guide this study:

**Research Question 1:** What are the perceptions and experiences of adult remote workers regarding inner speech and self-talk in relation to their functions and use?

**Research Question 2:** How can inner speech and self-talk be used as a self-help tool in a remote work environment?

Grant and Osanloo (2014) emphasized the significance of conducting a literature review to foster a profound understanding of the problem, purpose, and research questions, while Merriam and Tisdell (2016) described qualitative research formerly known as "qualitative inquiry:" (p. 6). Hence, it was important for researchers to elucidate the conceptual and theoretical frameworks guiding their studies (Grant & Osanloo, 2014). This study, characterized

by its exploratory nature, formulated two open-ended research questions to facilitate a comprehensive exploration of adult remote workers' perceptions and experiences regarding their use of inner speech and self-talk. These two research questions served as a conduit for gathering rich insights through qualitative research method. Specifically, this study employed the phenomenological research method to delve into the subjective perceptions and experiences of potential participants (Grant & Osanloo, 2014). This approach was chosen due to its alignment with the basic principles of phenomenology, enabling an in-depth exploration of inner speech and self-talk among adult remote workers. Given that inner speech and self-talk is a universal innate human experience, the qualitative phenomenological research method was a fitting approach for studying this phenomenon.

This study examined inner speech and self-talk in adult remote workers, using Vygotsky's (1934/1987) theory of inner speech as a conceptual framework, exploring the perceptions and experiences of inner speech and self-talk, focusing on fulfilling basic cognitive needs, linguistic devices, psychological needs, and self-regulations. This study drew on Piaget's (1964, 2006) focus on social aspects and Vygotsky's (1934/1987) focus on individual aspects of learning to construct a comprehensive conceptual framework for understanding inner speech. The qualitative phenomenological research study involved identifying patterns and themes in the data that related to the subjective perceptions and experiences of the participants. A clear plan had been developed for how data would be collected and analyzed to identify patterns and themes.

After considering the quantitative method or mixed method, the qualitative research method was chosen as it would be better suited for studies with small sample sizes, allowing for in-depth exploration of individual perspectives and experiences (Creswell & Guetterman, 2019).

Thematic analysis was employed by systematically categorizing and manually coding the transcripts. This process involved identifying and analyzing patterns, themes, and concepts within qualitative data (Creswell & Guetterman, 2019). By employing thematic analysis that would facilitate to categorize and interpret the data according to recurring themes that might emerge from the participants' perspectives and experiences. This approach was recognized for its flexibility and wide usage, and it had the potential to offer profound insights into the phenomenon being investigated (Creswell & Guetterman, 2019). Overall, using the research questions to consider the nature of the phenomenon being studied, the sample size, and the data analysis methods to be employed, it was concluded that using the qualitative phenomenological research method was justified and appropriate.

### **Site Information and Demographics**

For this study, there was no physical research site. Participants were selected from a global pool of remote workers across different demographics and geographic locations, with a requirement for English language proficiency. Eligible participants were adults aged 18 or older, actively engaged in remote work, and self-identified as remote workers on LinkedIn, a professional networking platform. Proficiency in English and typical speech and hearing abilities were also prerequisites. Given the nature of remote work, as remote workers can operate from various locations using the internet and digital devices, the principal investigator joined LinkedIn in January 2011. LinkedIn (2023) is a business and employment-focused social media platform. The principal investigator utilized LinkedIn as a virtual research site for participant recruitment due to its accessibility and diverse user base, allowing for purposeful sampling.

The problem studied was the awareness, understanding, and acceptance of inner speech and self-talk. To ensure a diverse representation across industries, purposeful sampling was

employed. According to the U.S. Bureau of Labor Statistics (2023)'s business response survey 2022, the top three industries with employees working remotely were information technologies (42.2%), professional and business services (25.0%), and educational services (19.7%).

Recruitment efforts focused on these industries, with 118 purposeful sampling recruitment posts sent via LinkedIn targeting information technologies, professional and business services, and educational services. Results from the recruitment posts were recorded: 76 posts (64.40%) went unread, 17 (14.40%) were read but received no response, and 10 (8.50%) declined participation. Four (3.40%) reported returning to the office on site, and 11 (9.30%) accepted participation. Ten participants were interviewed, with their demographics recorded in Table 4.1, including age, occupation, industry, gender and geographical location. Although job types were not directly relevant to the study, Table 4.1 included occupation for reference.

Ten semistructured, open-ended, interview questions were asked (see Appendix C) to explore the perceptions and experiences for adult remote workers regarding their use of inner speech and self-talk. The semistructured interviews were conducted via Google Meet and were recorded using Otter software for transcription, with the digital recording securely stored in a password-protected file. The transcripts were printed and organized. The collected data were manually coded. Participants were asked to compare their use of inner speech use between traditional and remote work settings. The principal investigator then analyzed the interview transcripts to identify changes in participants' use of inner speech and self-talk prior to COVID-19, during the pandemic, and in the postpandemic period.

The participants' interview transcripts were used to compare the functions of inner speech as discussed in the literature review. The literature review showed that inner speech and self-talk could be used to enhance the well-being in areas such as task performance,



memorization, communication, self-fulfillment, and self-regulation. Brinthaupt et al. (2015) noted that, when inner speech and self-talk was used as a self-reinforcing function, it could be focused on positive events, making it a self-help tool. Brinthaupt et al. argued that the inner speech self-reinforcing function could be used as a self-help tool.

### **Participants and Sampling Method**

This study took place using participants from the LinkedIn social media platform, which was selected for its relevance as a social media hub for remote workers. Potential participants were recruited by direct messaging them through LinkedIn with an invitation to participate and the participant information sheet. A purposeful sampling method was used. Participant criteria included the participant being an adult 18 or older, a remote worker, and identifying as a remote worker on LinkedIn. The study sought 10 participants. The principal investigator messaged the potential participants with the recruitment message via LinkedIn and included the participant information sheet as an attachment. Participants had self-identified as remote workers in their LinkedIn profile found under their name and job title, which made the purposeful sampling method feasible, meeting the criteria. Interested participants were asked to reach out to the principal investigator via her university email address, which had been provided in the message as well as the Participant Information Sheet.

The first 10 participants who reached out were chosen. Once the participant and the principal investigator chose a mutually agreeable time, the scheduled interview time and Google Meet link were sent to the participant. If more than 10 individuals indicated that they were interested, only the first 10 needed to be interviewed. A master list was used to hold names and emails of the participants during the recruitment phase. Although this principal investigator had no control over who responded to the invitation, this principal investigator reached out to 50

potential participants and encouraged them to contact this principal investigator via this principal investigator's university email address. After sending 118 recruitment posts, this principal investigator successfully obtained the desired number of participants, totaling 10 individuals.

The Participant Information Sheet (Appendix B) was included as an attachment in the recruitment message post during the recruitment phase. This information sheet could be reviewed prior to booking the interview. At the onset of each interview, this principal investigator conducted another review of the Participant Information Sheet. After this review, the participants were asked if they wished to continue. They had an opportunity to discuss any questions or concerns before the interview began. The participant then verbally acknowledged whether they would like to proceed with the interview. Upon obtaining verbal consent from the participant, this principal investigator commenced the interview. This principal investigator designed 10 open-ended interview questions (Appendix C) that were used during the Google Meet video interviews to gain insights into the two research questions. The participants had the right to skip or not answer any questions for any reason. The risks involved with participation in this research project were minimal. The risk of an invasion of privacy or loss of confidentiality had been minimized by using pseudonyms for each of the participants' names and by eliminating any personally identifying information from the study. The data collected for this study came from the participant responses in the semistructured interviews.

### **Instrumentation and Data Collection**

Semi-structured interviews were used to collect data for this research. The interviews were conducted individually with each participant through Google Meet and recorded through Google Meet with participant approval. Interviews were expected to last 30 minutes. Google Meet and the Otter transcription were chosen due to the principal investigator's familiarity with

these products. Afterward, the recorded interviews were transcribed using Otter software and reviewed for accuracy. Then, the transcripts were sent to each participant via email for their review. Participants were provided with five calendar days to review, retract, or withdraw any information. After five calendar days, if no revisions were suggested by the participant, the transcript was considered accurate.

The data collected for this study came from the participant responses in the semi-structured interviews. First, the collected data were organized by manually coding the transcripts to identify codes recurring themes or patterns that emerge in the participants' responses. Coding were completed manually in a Word document; no coding program was used. Codes were used to develop themes to address the research questions.

### **Data Analysis**

The data analysis for this study was transparent. This principal investigator used manual coding to identify recurring themes or patterns that emerged in the participants' responses (Creswell & Guetterman, 2019). The participants' responses were grouped according to their perceptions and experiences to conduct a thematic analysis. After completing all 10 interviews, the recorded interviews were transcribed using Otter software and reviewed for accuracy. The text was then exported and saved in Microsoft Word. On each page of the transcript, this principal investigator placed her name, the participant's pseudonym, and the date. The transcripts were then sent to each participant via email for their review. The participants were provided with five business days to review, retract, or withdraw any information. After five business days, if no revisions were suggested by the participants, the transcript was considered accurate.

Organizing the 10 transcripts for manual coding in a systematic and efficient manner was essential for the qualitative data analysis process. This principal investigator adopted a

methodical approach by creating a password-protected master folder on her computer to securely store all the transcripts. Within this master folder, individual subfolders were created and named according to the participant's pseudonym. Coding of the transcripts was completed manually in a Microsoft Word document, eschewing coding software programs. To maintain consistency, this principal investigator ensured that all 10 transcripts followed the same format, with uniform font, font size, and spacing. Margin notes were added to reflect this principal investigator's first impressions (Creswell & Guetterman, 2019). The collected data were organized by manually coding the transcripts to identify recurring themes or patterns that emerged in the participants' responses. With only 10 transcripts, the sample size was exceptionally small, making it straightforward to review and code the transcripts systematically by identifying key words and phrases within them.

The purpose of the manual-coding process was to evaluate the participants' perceptions and experiences of inner speech and self-talk and to explore the affectivity of inner speech, which had been highlighted in the positive and negative content of the participants' interview transcripts. If one round of coding did not yield sufficient meaningful information, a second round of coding was considered to delve deeper into the data's content. To enhance efficiency, color coding was used as a visual aid during the manual-coding process, facilitating rapid identification of key content, including important sections, quotes, and themes within each transcript. Open coding was employed to assign codes to text segments encapsulating vital themes, investigating the extent of the functions, use, and acceptance presented in the participants' inner speech and self-talk experiences. A list of assigned codes was generated, and these codes were then used to develop themes.

Following the first round of coding, a coding sheet was generated to systematize analysis further. Common threads (e.g., the state of consciousness and the role of inner speech and self-talk in self-regulation during everyday activities) were coded as recurring patterns shared among the 10 interviewees. These patterns were linked to the overarching theme of inner speech and self-talk acceptance. These themes were compared across the 10 participants to identify variations and nuances in their experiences. This comparative analysis provided more profound insights into how inner speech and self-talk is used among remote workers. A table summarizing these themes was developed (Table 4.2). Whenever possible, interview responses were cross-validated with the literature review in Chapter 2 to enhance the findings' credibility during data analysis. The findings and data analysis were reviewed during the creation of Chapter 5 for conclusion and recommendation.

### **Limitations, Delimitations and Ethical Issues**

#### **Limitations**

There were several limitations associated with this qualitative phenomenological study when exploring the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. Participants were asked to provide information, perceptions, and experiences regarding their usage of inner speech and self-talk. It was important to acknowledge that the language and concepts used in social dialogue during the interviews might not always fully capture the nuances and complexities of the inner speech perceptions and experiences. Thus, Limitation 1 was that, although this principal investigator assumed participants were who they said they were and could explicitly communicate during the interview what they were saying to themselves in inner speech and self-talk, the accuracy of such representation in a social dialogue could be challenged because of various factors such as memory biases, social

desirability biases, and the difficulty of precisely describing the inner experience in words according to this principal investigator's assumption. Therefore, this principal investigator approached the data analysis critically and reflexively, acknowledging the potential biases and limitations of the study.

Limitation 2 was that this principal investigator focused this study on remote workers who primarily use the English language on LinkedIn social media platform, which might not account for other cultural, educational, and social values. Moreover, Limitation 3 was that this study occurred post COVID-19 pandemic; therefore, participants might not have accurately remembered their experiences prior to the pandemic. Limitation 4 was that the study's sample size of 10 participants, which might limit the generalizability of the findings to other settings or populations. Limitation 5 was the recruitment of 10 participants from the LinkedIn community, which might lead to biased samples of individuals more familiar with social media platforms and technology. Limitation 6 was that this principal investigator adopted the working definition of data triangulation, sourced from Merriam and Tisdell (2016). According to this definition, data triangulation approaches, such as semistructured interviews, might introduce bias as the interviewer might unintentionally influence participant responses. To safeguard against lack of objectivity in the data triangulation approach, this principal investigator was aware of self-biases and preconceptions, acknowledging her positionality, experiences, and beliefs that might affect the research. By using data triangulation, which involved integrating various data sources and multiple theories from the literature review in Chapter 2, this principal investigator aimed to strengthen the dependability of its findings in this study.

## **Delimitations**

Delimitation 1 was the recruitment of 10 participants from the LinkedIn community, which might not be representative of all adult remote workers. Delimitation 2 was the small sample size of 10; however, Creswell and Guetterman (2019) suggested that small sample sizes were often sufficient to achieve data saturation and time intensive coding in most qualitative studies. Delimitation 3 was that this qualitative data collection method was not perfect, and the manual coding scheme might have overlapping areas for cognitive functions. Therefore, the findings of this study might not be generalizable to other contexts beyond adult remote workers or to other populations due to the specific focus on inner speech and self-talk in a remote work setting. Overall, these delimitations helped to establish the boundaries of this study and to clarify what this study was unable to address. By acknowledging and addressing these delimitations, this principal investigator could strengthen the validity and reliability of the findings and provide a more nuanced understanding of the research questions.

## **Ethical Issues**

Ethical issue 1 pertains to respect for participants in this research. According to the principles of the Belmont Report, research requires informed consent (Nagai et al., 2022). The Participant Information Sheet (Appendix B) containing all relevant information about this research was included as an attachment in the recruitment message during the recruitment phase. Participants voluntarily agreed to participate without coercion, and they could review the Participant Information Sheet prior to booking the interview. At the onset of each interview, this principal investigator conducted another review of the Participant Information Sheet, clearly explaining the study's purpose and how participants' data would be used. After this review, the participants were given the opportunity to discuss any questions or concerns before the interview

began. They then verbally acknowledged whether they wished to proceed. Verbal consent was obtained from each participant prior to commencing the interview. Furthermore, this study did not involve vulnerable populations, such as children, prisoners, or those with cognitive impairments.

Ethical issue 2 concerned protecting the personal information of participants to ensure their privacy and confidentiality. According to the principles of the Belmont Report, researchers must minimize harm to participants (Nagai et al., 2022). Maintaining confidentiality of interviewees was a critical ethical responsibility for this principal investigator. The risks involved with participation were minimal and included potential invasion of privacy or loss of confidentiality. These risks were minimized by using pseudonyms for participants' names and eliminating personally identifying information from the study. Pseudonyms helped protect identities and maintain confidentiality (Information and Privacy Commissioner of Ontario, 2015). The transcripts were stripped of any personally identifiable information, with participants' names replaced by unique pseudonyms as defined in the master list. This master list, stored securely and separately from study data, linked participant names and e-mails to assigned pseudonyms accessible only to the principal investigator.

Google Meet interviews took place in private settings to prevent eavesdropping, with participants given the option to turn off their camera. They also had the opportunity to review interview transcripts for accuracy. Recordings were stored on the principal investigator's personal password-protected computer. The data were only collected during one-on-one participant interviews with participant consent. According to Thomas (2017), member checks are commonly presumed to enhance the credibility of qualitative research. Therefore, member checks were employed to enhance this research's credibility, with participants reviewing their



interview transcripts for accuracy before data analysis commenced. Once member checking was complete, recorded interviews were destroyed, and the master list of personal information was securely disposed of. All interview data were stored in password-protected files, both digitally and in hard copy, with sole access granted to the principal investigator whom did not have any research partners. Dissemination of findings ensured no information that could identify participants was included, maintaining strict privacy and confidentiality measures throughout the research process.

If participants happened to talk about sensitive or sad stories during the interviews, that might cause psychological distress, this principal investigator maintained professional distance, refraining from asking follow-up questions that could potentially cause the risk of embarrassment and reputational harm (CITI Program, 2018, Module 2). Participants were allowed to withdraw from the study at any time prior to completion of the interviews and destruction of the master list. Should a participant choose to withdraw, all data collected from that participant would be promptly destroyed; however, no participants withdrew from this study. No physical copies of data containing participants' personal information were retained. Participants retained the right to exit the study at any point, and if the master list had been destroyed, their data would still have been used in the study, though as previously mentioned, no participant chose to exit. The master list was destroyed upon completion of data transcription. All other study data were slated for retention until December 31, 2026, with destruction scheduled for January 1, 2027. Representatives of the University of New England (e.g., faculty advisors, Office of Research Integrity) could access the study data upon request, as necessary.

## Trustworthiness

### Credibility

Merriam and Tisdell (2016) highlighted Patton's (2015) emphasis on the significance of the researcher's credibility and the choice of methodology in ensuring research credibility. According to Patton's (2015) perspective, the trustworthiness of data **is** directly connected to the trustworthiness of the individuals who were responsible for the data collection and analysis. **A** researcher's training, experience, and intellectual rigor are crucial in determining the credibility of a research study. Merriam and Tisdell (2016) explained that increasing credibility, referring to the alignment of research findings with the reality being studied, required reflexivity and self-awareness of this principal investigator's role in the data collection and analysis process, as well as with the potential impact of personal biases. To maintain credibility, this principal investigator strategically distanced her perception from the topic and removed any bias that could affect the knowledge and experience gained through this organized study using epistemology via observations, questionnaires, and semistructured interviews that were considered minimal risk research methods.

Trochim (2022) explained that the credibility of qualitative research relies on ensuring that the participants involved in the study considered the results to be trustworthy and reliable. In accordance with Trochim's viewpoint, this principal investigator acknowledged that the credibility of her study was derived from the perspective of the participants in the research. By comprehending the phenomena through review of relevant literature and incorporating the perspectives of both the existing literature's participants and the 10 participants in this study, it was understood that the participants themselves held the legitimate authority to assess the credibility of the findings. Langland-Hassan and Vicente (2018) provided support to Trochim's

(2022) perspective by highlighting the value of individuals' introspective access to their own inner speech. Langland-Hassan and Vicente (2018) explained that this access could be leveraged to gather information about the nature and function of inner speech. By emphasizing the importance of the individuals' ability to reflect upon and to access their inner speech, they contributed to the understanding that the credibility of this qualitative research relied on capturing the participants' unique perspectives. Langland-Hassan and Vicente (2018) suggested that individuals' subjective experiences of inner speech could provide valuable insights in the rationale and significance of this study.

The focus of the study was to gain insight into the phenomenon of inner speech and self-talk functions used in daily life from the perspective of the participants. Trochim (2022) asserted that, "the participants are the only ones who can legitimately judge the credibility of the results" (p.1). Overall, the combination of Trochim's (2022) and Langland-Hassan and Vicente's (2018) viewpoints underscored the significance of the participants' introspective access to their inner speech as a crucial factor in determining the credibility of qualitative research. By recognizing participants' firsthand understanding of their inner speech, this principal investigator ensured that the findings were grounded in the participants' own lived experiences, which increased the credibility of this study.

### **Transferability**

The aim of this study was to capture the subjective inner speech and self-talk experiences of 10 participants, which might have limited the generalizability of their experiences to other populations or settings. Thus, the findings from this study might not be applicable to other contexts or populations of adult remote workers. To enhance transferability, the LinkedIn social media platform was used, where members communicated exclusively in English. However,

given the nature of remote work and its potential for operation from various locations using the internet and digital devices, the geographical location and home community of participants were of less relevance. This principal investigator assumed that the proposed methodology could be repeatable in any country and in any language with the same or similar demographics and setting according to the rich and detailed descriptions of the research context, the participants, the data collection and analysis procedures, and the findings.

### **Dependability**

The aim of this study was to report the findings that was accurate to represent the subjective inner speech and self-talk experiences of 10 participants. This principal investigator chose to conduct a qualitative phenomenological study that aimed to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. The research questions were focused and guided the study's direction, and the data collection methods, such as semistructured interviews and manual coding of transcripts, had been widely used in qualitative research. The research design, which included the use of member checking process, increased the dependability of this study (Creswell & Guetterman, 2019; Thomas, 2017). However, the dependability also depended on the relevance and significance of the findings, the accuracy and reliability of the data collection and analysis, and the coherence of the arguments, which are presented in Chapter 4.

### **Confirmability**

This principal investigator ensured the degree to which the findings of this study were based on the data that was collected and analyzed, rather than on her own biases or perspectives. To enhance confirmability, the methodology was transparently detailed in this chapter. As the last but not the least important step, the technique of member checking was used (Creswell &

Guetterman, 2019; Thomas, 2017) in which the 10 participants were invited to review their transcript for accuracy. The member checking was an important process used in this qualitative phenomenological study to obtain the participants' corrections, if any (Creswell & Guetterman, 2019; Thomas, 2017). This process allowed this principal investigator to ensure that the findings accurately reflected participants' experiences and perspectives, as well as to gain additional insights or perspectives that were not initially apparent during the interview. It was an important process to demonstrate that the findings were grounded in the participants' experiences and the principal investigator and interviewer's biases or preconceptions had not influenced them.

### **Summary**

In summary, in this chapter, the methodology for this qualitative phenomenological study was discussed aiming to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. This study sought to investigate whether inner speech and self-talk could be used as a self-help tool among adult remote workers.

Semistructured interviews were conducted with 10 participants who had been recruited from the LinkedIn community, a social media platform on which adult remote workers were members. The interviews were recorded and transcribed using Otter software, and the data were analyzed using thematic analysis. Through the study, this principal investigator explored three main themes in relation to inner speech and self-talk, including their functions, usage, and acceptance.

The limitations, delimitations, and ethical issues involved in a qualitative phenomenological study were also discussed exploring the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. The limitations encompassed factors such as (a) time and place, (b) the choice of participants with limited generalizability, (c) potential for bias, (d) lack of objectivity, and (e) the possibility of socially desirable responses

and participant fatigue. Delimitations were also outlined, including the limited scope and sample size as well as the timing of the study. Ethical issues were addressed, such as protecting the participants' personal information, obtaining informed consent, and ensuring privacy and confidentiality. Trustworthiness was also discussed, including credibility, transferability, dependability, and confirmability. Through the study, this principal investigator aimed to capture the subjective inner speech and self-talk experiences of 10 participants, which might limit generalizability to other contexts or populations of adult remote workers. This principal investigator addressed these limitations to ensure the credibility, validity, and reliability of the findings. There were no likely benefits to the participants by being involved in this research project; however, the information to be collected might contribute to a better understanding of people's perceptions of inner speech and self-talk, which could benefit all remote workers eventually.

## CHAPTER 4: RESULTS

Inner speech and self-talk is the central phenomenon that this principal investigator explored in this qualitative phenomenological study. In this chapter, this principal investigator presented the results of her investigation. The purpose of this qualitative, phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech and self-talk. The definition of inner speech and self-talk encompasses various terms, including inner speech on its own, self-talk on its own, inner speaking, egocentric speech, private speech, self-statements, phonological loop, internal dialogue, self-directed, and verbal thought (Alderson-Day & Fernyhough, 2015; Geva & Warburton, 2019). The perceptions and experiences were generally defined as the awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers. This research is a part of the principal investigator's doctoral dissertation. The study was guided by two broad and overarching research questions:

**Research Question 1:** What are the perceptions and experiences of adult remote workers regarding inner speech and self-talk in relation to their functions and use?

**Research Question 2:** How can inner speech and self-talk be used as a self-help tool in a remote work environment?

The study's participants are listed in alphabetical order by pseudonym in Table 4.1. Data for this research were collected through semistructured interviews. These interviews were conducted with 10 participants via Google Meet and recorded with their consent. Each of the 10 interviews lasted approximately 30–40 minutes. The recorded interviews were transcribed using Otter software, and this principal investigator subsequently reviewed them for accuracy. The transcripts were then shared with the participants for their review via email. The participants

were afforded five business days to review, retract, or withdraw any provided information. The transcript was considered accurate if no changes were suggested within this period. The data collected in this study originated from the participants' responses during the semistructured interviews. The collected data underwent organization by manually coding the transcripts and identifying recurring themes or patterns in the participants' feedback. Coding was manually executed within a Microsoft Word document.

**Table 4.1**

*Participants*

Pseudonym	Age	Occupation	Industry	Gender	Geographical location
Abel	60–65	Adult ADHD advisor	Community service	Male	San Jose, California, United States
Chris	25–30	Software engineer	Medical	Male	Markham, Ontario, Canada
Claire	25–30	Human resources	Payroll	Female	Newmarket, Ontario, Canada
Jason	25–30	Engineer	Artificial intelligence	Male	Markham, Ontario, Canada
John	60–65	IT consultant	Retails management	Male	Zhuhai City, Guang Dong, China
Macy	40–45	Education consultant	Higher education	Female	London, England
Mohan	25–30	Business consultant	Medical	Male	Islamabad, Pakistan
Norma	45–50	Human resources	Nonprofit sector	Female	North York, Ontario, Canada
Rej	50–55	Financial advisor	Finance	Male	West Palm Beach, Florida, United States
Silver	55–60	Private tutor	Education	Female	Toronto, Ontario, Canada



### **Analysis Method**

This study was focused on understanding how adult remote workers engage in inner speech and self-talk. Semistructured interviews were conducted with 10 participants. The participants were recruited through the LinkedIn social media platform, which was selected for its relevance as a social media hub for remote workers. To achieve a diverse representation of participants across different industries, purposeful sampling was employed. The criteria for participant selection included being an adult of Age 18 or older who was actively engaging in remote work and who self-identified as a remote worker on the professional networking platform LinkedIn. To be eligible, individuals needed to possess proficiency in the English language and needed to demonstrate typical speech and hearing abilities.

These semistructured interviews revealed how individuals used inner speech and self-talk while working remotely. Following each interview, the Otter transcript was reviewed and was subsequently downloaded into a standalone Microsoft Word document. To enhance the credibility of this study, member checks were used to secure participant approval for their interview transcripts before initiating data analysis regarding the participants' experiences and perspectives. After each interview, the transcripts were promptly emailed to all participants, usually on the same day or the following day. Among the 10 participants, four responded to the email with their approval on the same day, while one participant provided some edits but still managed to respond on the same day. The remaining six participants did not acknowledge the transcript approval email. After waiting for 5 business days without any response, the transcripts were considered to be approved. Following the completion of 10 interviews and subsequently conducting the individual analyses, this principal investigator developed a coding framework to dissect the interview data. By investigating the extent of the functions, use, and acceptance

presented in the participants' inner speech and self-talk experiences, open coding was employed to assign codes to text segments that encapsulated vital themes. A list of assigned codes for relevant segments was generated, and these codes were then used to develop themes.

Common threads (e.g., the state of consciousness and the role of inner speech and self-talk in self-regulation during everyday activities) were coded as recurring patterns shared among the 10 interviewees. These patterns were linked to the overarching theme of inner speech and self-talk acceptance. These themes were compared across the 10 participants to identify variations and nuances in their experiences. This comparative analysis provided more profound insights into how inner speech and self-talk is used among remote workers. Whenever possible, this principal investigator cross-validated interview responses with the literature review in Chapter 2 to enhance the credibility of the findings. In summary, analyzing the perceptions and experiences of adult remote workers regarding inner speech and self-talk followed a systematic process that involved coding, thematic development, comparison, and potential cross-validation.

### **Presentation of Results and Findings**

The themes revealed in the coding are illustrated in Table 4.2. Through coding the transcripts from the interviews with the 10 participants, three primary themes emerged regarding inner speech and self-talk. Theme 1 and most prevalent theme was the state of consciousness. Theme 2 was self-regulation. Theme 3 was social interaction. A conventional coding approach was employed in the role as the principal investigator, thus, this principal investigator assumed full responsibility for being the exclusive coder in this data analysis process. Coding such qualitative data extended beyond the task of affixing notes and labels to the printed transcripts; it necessitated an in-depth comprehension of inner speech and self-talk that was embedded in the participants' responses during the semistructured interviews. According to Campbell et al.

(2013), the accuracy of response decoding is linked to the coder's familiarity with the implication of the subject matter explored within the interviews. Therefore, this principal investigator approached the coding process with confidence, swiftly discerning the emergence of themes that were poised to play a central role in this study. The comprehensive literature review undertaken in Chapter 2 greatly facilitated this discernment, for it substantially contributed to this principal investigator's ability to interpret the participants' narratives and to explain the key findings presented in this chapter.

**Table 4.2**

*Themes and Codes*

Theme	Emerged from codes
State of consciousness	<ul style="list-style-type: none"> <li>▪ Being conscious, intentional, affirmative, and positive</li> <li>▪ Thinking logically and creating brain patterns in a highly flexible manner</li> <li>▪ Self-motivating, being a powerful monologue</li> <li>▪ Self-criticism, being emotionally charged with negativity</li> <li>▪ Lucid dreaming</li> </ul>
Self-regulation	<ul style="list-style-type: none"> <li>▪ Self-discipline and self-regulation</li> <li>▪ Self-soothing and calming</li> <li>▪ Self-reinforcement and self-reassurance</li> </ul>
Social interaction	<ul style="list-style-type: none"> <li>▪ Conceptualizing and processing complex thoughts, work-related</li> <li>▪ Mental roadmap and rehearsal and roleplay for planning and solving problems</li> <li>▪ Social assessment in finding better words for supporting dialogues</li> <li>▪ Anger management, maintaining and improving mental wellness</li> <li>▪ Self-guidance, acquiring skills without formal instructions</li> </ul>

## **Theme 1: State of Consciousness**

The state of consciousness regarding the use of inner speech and self-talk was the first finding derived from the manual coding of the transcripts. The participants were keenly aware of their inner speech and self-talk. The state of consciousness could be considered an indicator of the participants' awareness of their use of inner speech and self-talk. During the interviews, they provided detailed insights into their perceptions and experiences. One particularly intriguing finding within this theme was that exhibited by a participant, John, who was in his 60s. He was an IT consultant and a digital nomad who travelled extensively in Asia.

John's inner speech and self-talk experience was revealed as connected to the concept of lucid dreaming, akin to the phenomenon that Macpherson (2019) and Vallat and Ruby (2019) described in their studies on lucid dreaming whereby individuals intentionally enter a state of consciousness where they are aware of their dreams and could even exert control over their dream content. The inclusion of lucid dreaming in this finding was rooted in the profound insight shared by John during his interview, particularly in response to Interview Question 2. John vividly described his childhood experiences of "traveling around the world" experiences where he had not yet physically undertaken a trip during that phase of his life. Instead, he candidly revealed that these were recurring dreams, which he actively nurtured and shaped. John's emphatic statement, "So, I did that a few times. I mean, not literally around the world, but I engaged in inner speech and self-talk while consciously planning my imaginary global travels," served as a powerful testament to his ability to consciously craft and control the content of his dreamscape. This revelation was both remarkable and unexpected, for it shed light on his capacity to engage in lucid dreaming, which, in turn, supported this principal investigator's

assumption that inner speech and self-talk could be linked to heightened awareness of one's cognitive processes.

This finding came as a surprise regarding John's revelation about his childhood experience with inner speech and self-talk when he enjoyed dreaming about travelling around the world. During these dreams, he actively cultivated the scenery and engaged in internal dialogues with himself, discussing questions like, "What if I don't have enough money? Is my plan feasible?" John regarded his inner speech and self-talk experiences as highly motivating. Harnessing his vivid imagination and strong willpower, he turned his childhood and adolescent dreams into reality during his adulthood.

The coding process unearthed a prevailing awareness among the participants regarding their inner speech and self-talk—a cognitive phenomenon characterized by internal dialogues held in a deliberate and often conscious manner (Macpherson, 2019; Vallat & Ruby, 2019). The intriguing aspect of John's use of inner speech and self-talk extended beyond mere self-expression; it served as a useful self-help tool for him to define, describe, and comprehend his aspiration to travel around the world. This finding, along with John's narrative, not only enriched the qualitative fabric of this study but also provided compelling evidence to support the findings of Macpherson (2019) and Vallat and Ruby (2019) on lucid dreaming. They delved into the phenomenon of lucid dreaming in which individuals, much like John, intentionally enter a state of consciousness within their dreams, allowing them to manipulate and design the dreams' narrative and scenery. In John's narrative, he embodied the role of both the dreamer and the architect, steering his dream voyages with intention and creativity.

This connection between John's experiences and the findings of Vallat and Ruby (2019) served as compelling evidence in confirming the coding of Theme 1, the state of consciousness.

This theme underscored how individuals, like John, could actively engage with their inner thoughts and imaginings to construct unique and meaningful experiences. This principal investigator, who is well-versed in the domain of inner speech and self-talk following an extensive literature review, greeted these findings with little surprise, although the unexpected narrative of lucid dreaming added an intriguing dimension. Incorporating John's narrative into this study further supported this principal investigator's assumption that inner speech and self-talk could be used as an accelerator to self-regulation in a manner akin to the cultivation of lucid dreaming, which involves heightened awareness of one's thought processes when dreaming (Vallat & Ruby, 2019). Although the level of awareness concerning inner speech and self-talk varied among individuals and could be influenced by various factors (e.g., mindfulness, introspection, and self-reflection), it was noteworthy that almost all the participants exhibited a heightened sense of awareness. Coding revealed that they were able to observe and analyze keenly their inner speech and self-talk. However, a minority of the participants reported having a lower level of awareness with their inner speech and self-talk occurring more automatically and unconsciously. This variance in consciousness pertaining to inner speech and self-talk had significant implications, potentially affecting an individual's ability to control and modify their thought processes, which in turn could affect their cognitive and emotional well-being.

John had mastered the art of using positive inner speech and self-talk as a useful tool for complex task planning. He employed inner speech and self-talk as a rehearsal mechanism for dialogues that preceded interactions with his business clients. Notably, his inner speech and self-talk appeared event-driven, becoming more active in response to challenging situations. John candidly disclosed, "If there's no frustrating event, I don't engage in extensive self-talk. But when something happens, I become highly active with self-talk, to the extent that affects my

ability to sleep.” John was able to observe and analyze his inner speech and self-talk, and his narrative offered valuable insight into the transformative potential of inner speech and self-talk, not only in conscious waking moments when he was working but also in the realm of his most imaginative and subconscious states of his mind.

Given that the connection between John’s experiences and the theme of state of consciousness was central to this study, this principal investigator’s coding supported Morin et al.’s (2015) assumption that people had been intrigued by their own inner experiences since they first became aware of them.

Abel, another participant, was in his 60s and worked as an education consultant in San Jose, California, United States. Abel had engaged in a significant amount of self-talk throughout his life. He emphasized that self-talk persisted, with the 5-year-old version of himself residing in his thoughts. Coding revealed that the participants’ inner dialogue became their primary thought mode, transitioning from a monologue to a dialogue. They were able to consciously differentiate between negative and positive internal monologues, tracing their origins and transforming them. For instance, Abel could reassure himself, saying, “No, I’m not sloppy and lazy.”

Abel voluntarily shared his experiences, particularly regarding his ability to examine and convert his negative inner voice into a positive one. Although, in the interview, this principal investigator did not specifically inquire about visual imagery, it became evident that Abel’s insights align with the findings of Loevenbruck et al. (2018). This data suggested that inner speech and self-talk could manifest through visualization in both conscious and subconscious states of mind. Upon further analysis, it became clear that Abel’s descriptions of his inner speech and self-talk experiences often involved vivid visual imagery. The coding results were the participants’ experiences; in describing the state of consciousness from a visual imagery point,

Abel's inner speech and self-talk experience was underscored using visual imagery within inner speech and self-talk as a vividly imagined form of speech and an inner perceptual experience. In Abel's words, "That's when I consciously replace the self-talk with the new, positive self-talk." Abel consciously harnessed his inner speech and self-talk to gain awareness of his negative thoughts, which seemed like unwelcome tenants in his mind; whenever he attempted to silence them, they grew even louder. Through conscious mindfulness and acceptance of his inner speech and self-talk, he used these cognitive processes to create new thought patterns. Coding revealed examples of the participants' new thought patterns that replaced their old negative self-talk patterns as a coping mechanism. Abel coined the term the "right rabbit hole," evoking the image of a rabbit disappearing down a hole in the ground. Abel's awareness of inner speech and self-talk symbolized his determination not to let his negative self-talk delve deeper into unproductive territories. Instead, he aimed to create new, constructive thought patterns, ensuring that he could navigate his way successfully. He maintained a conscious awareness that inner speech and self-talk could be a blessing or a curse. The coding revealed that the participants, rather than succumbing to negativity, acknowledged it and replaced it with positive self-talk.

Another participant, Macy, was in her 40s. She was pursuing her master's degree in education in London, England. She mentioned that inner speech and self-talk played a conscious role in steering her life. She explained that negative self-talk could deter her from addressing life's challenges, while positive self-talk propelled her forward. The coding revealed alignment between Macy and Abel, for they shared a similar experience: both could consciously distinguish between negative and positive internal monologues, tracing their origins and transforming them. Macy spent 7 years actively unlearning her past negative internal monologues and replacing them with positive mantras to nurture a positive form of self-talk. She expressed satisfaction in



her ability to counteract negative self-talk. For example, she could reassure herself by saying, “I am strong, I am brave, I can overcome difficult challenges.”

Another participant, Mohan, was in his mid-30s and worked as a data analyst in the medical field in Pakistan. Mohan planned to work in Europe in 2024 as a remote worker, granting him the freedom to leave Pakistan. Notably, Mohan shared a fascinating experience from his religious studies. When he read the Quran, he perceived the voice of God as though God was communicating directly with him within his mind. This auditory imagery was often accompanied by vivid visualizations of scenes depicted in the Quran.

Mohan’s inner speech and self-talk experiences within the context of his religious studies aligned with and supported the findings of Caracciolo and Hurlburt (2016). Caracciolo and Hurlburt argued that visual images could demonstrate how inner speech and self-talk manifests through visualization in conscious and subconscious states of mind. In Mohan’s religious studies, his self-talk was deeply rooted in his spiritual pursuits, serving as a source of satisfaction, emotional well-being, and a conscious means to connect with God. He described this process by saying, “I can read, and I engage in inner dialogue with myself; they are like self-talk in my mind.” Mohan’s inner speech and self-talk functioned as his spiritual guide. This finding came as a surprise that Mohan’s revelation about his experience with inner speech and self-talk occurred during his lifelong learning and practicing the Quran when he relied heavily on the dialogues between himself and his God. He explained that when faced with deciding whether to leave Pakistan for Europe, Mohan sought guidance from his inner speech and self-talk. It advised him, “Give me one day,” prompting Mohan to allocate one day for contemplation and prayer. After one day, Mohan believed he received a message from God. He heard the voice in his head saying, “Go to Europe, and you can make a significant impact there! You can introduce

innovations in Europe and achieve substantial financial success.” He concluded that he felt a deep sense of satisfaction because he had honed his expertise in using inner speech and self-talk for spiritual guidance.

Lastly, Norma stood out as a unique finding among the 10 participants. In her early 40s, Norma operated as a Human Resources Coordinator from her home in, Ontario, Canada. Her perspective added a contrasting dimension to this study. Norma described her inner speech and self-talk as largely unconscious and negative. Her inner dialogues tended to be spontaneous and emerged as unthinking reactions, primarily in non-work-related situations when she experienced intense anger or profound sadness, which she often preferred to conceal. However, she did acknowledge that in more conscious and relaxed settings, her inner speech could become more encouraging and positive. Norma could not recall using her inner speech and self-talk for work-related matters. However, she delved into how she used inner speech and self-talk to cope with the grieving process following her mother’s passing. Since Norma did not have a heightened consciousness concerning her inner speech and self-talk, she consciously journaled her thoughts. She explained that, although she was not aware of her inner speech and self-talk, she found solace in expressing her thoughts in writing. In Norma’s experience, her inner speech and self-talk had always been typically emotionally charged. When faced with overwhelming sadness or the urge to cry, she found that journaling became the most influential self-help tool. This practice of recording her thoughts in a diary dated back to her childhood and continued into her adulthood. Norma believed that, if inner speech and self-talk could be of assistance, they were worth documenting in written form, “Inner speech allows me to be more composed and more together when I share my thoughts with other people in writing.”

Comprehending John's, Abel's, Macy's, Mohan's, and Norma's perceptions and experiences—whether related to the world travel, the right rabbit hole, the positive mantras, the connection with God, or the grieving process—shed light on the functions and applications of inner speech and self-talk. When these participants were consciously aware of their inner speech and self-talk, it implied that they were actively recognizing and monitoring their inner thoughts and dialogues occurring within their minds. This heightened consciousness of their inner cognitive processes was a recurring aspect. This understanding contributed to this study of how inner speech and self-talk could serve as an invaluable self-help tool. In summary, coding of the data illuminated the state of consciousness theme. Their experiences highlighted how inner speech and self-talk functioned as catalysts for self-reflection, awareness, and efficacy, which were crucial for maintaining mental wellness (Morin et al., 2018).

## **Theme 2: Self-Regulation**

Having explored the intricate landscape of inner speech and self-talk within the context of the state of consciousness theme, the second compelling theme that surfaced during the coding process from the transcripts was Theme 2, self-regulation. Although the state of consciousness theme illuminated how inner dialogues shaped self-awareness and efficacy, this new theme explored how inner speech and self-talk was actively employed as a self-help tool for self-guidance and self-regulation. Theme 2 emerged naturally, for all participants revealed a distinct pattern of using their inner speech and self-talk to regulate their thoughts, emotions, and behaviors. Once the participants had defined their interpretation of inner speech and self-talk, the interview focused on exploring their experience in their everyday environment. The participants' perspectives of their inner speech and self-talk aligned with the findings of Greenberg et al., (2021), who emphasized that self-communication and self-commitment constitute integral

aspects of everyday life within the field of psychology. Furthermore, Greenberg et al. highlighted the propensity of individuals to adapt their thoughts and behaviors to harmonize with their personal standards, while establishing future goals, which underscored the significance of inner speech and self-talk in guiding one's actions and aspirations.

The coding revealed that verbal guidance was a component of self-regulation. Chris was a senior, embedded, system engineer in his mid-20s in Ontario, Canada. Not only did inner speech and self-talk play a conscious role in Chris' life, but he also emphasized that he relied heavily on inner speech and self-talk as a self-help tool for his daily thought processing. To him, inner speech and self-talk was the essential means through which he planned his actions in his field of work, methodically programmed himself for practical problem solving, and navigated the intricate complexities of the world. For Chris, inner speech and self-talk served as the cognitive backbone that guided his actions, enabling him to approach his tasks logically and to confront the challenges that the ever-evolving software engineering landscape presented. In Chris' perspective, inner speech and self-talk was the foundational cognitive pillar guiding his actions. He described his experience with inner speech and self-talk, "It is how I formulate my thoughts and how I approach the world." It empowered him to approach tasks with logical precision, enabling him to confront the evolving challenges of his profession effectively. His inner dialogues not only enhanced his work but also gave him a structured framework for comprehending and addressing the aspects of the world around him.

The coding of the data identified the participants' universal acceptance of inner speech and self-talk as a form of verbal guidance that was a solid form of self-regulation. Chris, for example, acknowledged that ultimate accountability rested with him; no external source could dictate the best action. He admitted his verbal self-guidance was being stringent in controlling

and managing his thoughts, emotions, and behaviors to attain specific goals and maintain self-discipline. Chris placed his faith solely in intrinsic self-motivation, eschewing external motivators. He proudly asserted that using inner speech and self-talk was his pathway to accomplishment and personal empowerment.

Another participant, Silver, was in her 60s and worked as a private tutor in Ontario, Canada. Her perspective aligned closely with Chris' perspective; both of them believed that external sources could not dictate the best course of action for them. Silver emphasized the function of inner speech and self-talk as a self-help tool within her daily cognitive processes. She relied on her inner dialogues extensively for tasks (e.g., lesson planning for her students), meticulously crafting individual lesson plans, and facilitating the diverse learning needs of her students. In Silver's view, inner speech and self-talk was the foundational cognitive pillar that guided her daily planning actions. She offered an example, "My daughter is in Guelph studying and then I have to visit her maybe every 2 or 3 weeks, I use self-talk to plan to go there. I need to make some food for her. So, in my thought, I am thinking, [Do] I have the ingredients or not? Do I have to buy or not? How many days do I need to prepare in advance?" It empowered her to approach tasks with well-paced precision, enabling her to address the ever-evolving challenges of her teaching profession effectively. Her inner dialogues enhanced her tutoring abilities and contributed to more harmonious family relationships with her daughter and husband. As predicted, participants expressed that inner speech and self-talk are a significant force for empowerment.

Another participant, Claire, was in her mid-20s and operated from her home as a human resources coordinator in Ontario, Canada. Claire's perspective offered a unique angle to this study. Although Silver provided insights from the perspective of a teacher and tutor, Claire

viewed inner speech and self-talk as a self-instruction tool for self-improvement and skill acquisition, all without the need for formal guidance from a teacher. Claire heavily relied on her inner dialogue as a means of self-teaching and self-guidance. Claire's approach aligned with Chris' approach, wherein both emphasized that their inner dialogues enhanced their work performance and provided them with a structured cognitive framework for understanding and learning new concepts and skills. Nevertheless, Claire, Chris and Silver recognized that in a sometimes-challenging world, self-talk is a calming influence that contributes to their mental well-being and overall wellness.

In a parallel vein, within the context of the state of consciousness theme, Abel elaborated on the enduring significance of his inner dialogue in his life. He described, "Self-talk is the diet. It is not a dialogue. It is a monologue. It is very, very powerful." He likened self-talk to a powerful influencer, functioning as a profound source of verbal self-guidance and a driving force propelling his actions. With unwavering confidence, Abel articulated his firm belief in harnessing inner speech and self-talk to reshape any circumstance skillfully. Abel was resolute in his conviction that the narratives he meticulously crafted within his mind exerted significantly more influence than those he conveyed outwardly to other people. In the realm of verbal self-guidance, Abel asserted that his inner realm of thought held the actual power to shape his experiences and decisions.

RCJ was a financial consultant in his 50s who worked from home in Florida, the United States. RCJ's story could fit within the state of consciousness theme, for he also described inner speech and self-talk as highly intentional with significant flexibility. What set him apart from the other nine participants was his unawareness of inner speech and self-talk until he attended graduate school, where a professor explicitly lectured on the topic. After those lectures, RCJ

gained the ability to compartmentalize inner speech and self-talk better and used it effectively as a roadmap for his daily activities. He found it to be valuable in navigating challenging situations throughout the day, from the moment he woke up in the morning until he went to bed, using verbal self-guidance for self-motivation, anger management, and self-discipline. He asked himself, “Do I have the skills? Do I have the patience? Do I have the time necessary to take on this project?” Although he had no recollection of using inner speech and self-talk during childhood, he had been consciously teaching his children to employ positive inner speech and self-talk. RCJ learned the fundamental inner speech and self-talk technique during graduate school, and he had consistently applied this technique for self-guidance and self-regulation in his career and family life. His mastery of positive inner speech and self-talk had contributed to his success in both areas. RCJ proudly said, “Inner speech and self-talk allows me to succeed. For example, okay, what are some of things that are gonna get this done and what somethings I cannot do to get this done?”

In summary, all 10 participants revealed their experiences on how they proactively used verbal self-guidance as supportive dialogues for self-discipline, self-improvement, self-regulation, self-soothing and calming. In the self-regulation theme, the findings revealed how participants like Chris, Silver, Claire, Abel, and RCJ harnessed the power of inner speech and self-talk as a cognitive tool for self-guidance, self-improvement, and emotional regulation. Their narratives revealed how inner speech and self-talk contributed to their overall well-being and personal growth. In contrast, Norma’s perspective offered a distinctive narrative within this theme, highlighting an alternative aspect of verbal self-guidance and self-regulation through inner speech and self-talk that emerged as unthinking reactions, primarily in non-work-related contexts, specifically during instances of heightened anger or deep sadness. Together, these

participants' experiences offered valuable insights into the diverse applications of inner speech and self-talk as a means of self-help in various contexts.

### **Theme 3: Social Interaction**

The third theme that emerged from the participants' stories was social interaction. This theme highlighted how inner speech and self-talk was used by most participants in the context of remote work and its impact on social interactions. It discussed how participants like Claire expressed concerns about isolation and the absence of face-to-face interactions in remote work, emphasizing the function of inner speech and self-talk in managing these challenges. Although Claire had generally been content in a remote work environment, she believed that remote work would undoubtedly be a part of the worldwide post-COVID economy. Claire's perspective of her inner speech and self-talk aligned with the findings of Banerjee and Rai (2020), Bloom (2020), and Brooks et al. (2020), the increase of remote work and possibly social isolation could cause chronic loneliness and boredom for many people. Claire described the lack of supervision and the absence of colleagues being physically present as both a blessing and a curse. The blessing was that there was no one watching over her and there were no interruptions at home; however,, she felt the pressure of having to manage all aspects of work independently. This "do-it-all" approach could take a toll on her, leading to increased reliance on Inner speech and self-talk, especially in matters of self-discipline, where she frequently questioned herself, asking, "Did I get that done?" Claire took pride in her ability to acquire many skills independently without needing a trainer or formal instruction. However, she emphasized the importance of socialization in a work setting. Multiple participants emphasized sitting behind a computer screen and interacting with people virtually all day did not constitute genuine socialization. Claire felt team morale had disappeared, and the sense of shared purpose had vanished. She expressed, "When



talking with someone you know on the other side of the screen, like right now with you, we are not together.” Not only Claire, but also Jason, a young engineer who worked in the artificial intelligence industry that was a dynamic and rapidly evolving business sector that focused on the development and application of technologies, expressed concerns about isolation. Jason and Claire both mentioned that during virtual meetings, they missed reading people’s body language, observing their full reactions, and even knowing if they were genuinely paying attention. The coding revealed that, regardless of age and industry, the participants believed that employees, especially the younger generation, were better off with a hybrid work model combining remote and on-site work. The participants stressed the importance of regular face-to-face human interaction in the office to improve mental wellness. The participants’ opinions connected with new psychology research that indicated that small talk in a traditional brick-and-mortar setting was a source of work enjoyment and mental wellness, whereas “water cooler talk,” a reciprocity in conversation, could be lost in a remote work environment and culture (Cruz, 2020; Jacks, 2021). According to Meagher and Cheadle (2020), mental wellness concerns are on the rise, and limited, available support and resources meant that people are struggling to cope with the situation. McLaughlin et al. (2022) and Murthy (2021) raised concerns about added stress that is caused by social isolation.

Although social isolation posed a minor issue for Claire, it proved to be a significant challenge for Mohan. As a data analyst in the medical field, Mohan explained that his team encountered severe difficulties when the data analysts and their clients, who happened to be medical doctors, could not connect face-to-face. Both parties felt that in-person discussions were necessary. The information technology (IT) team could manage data analysis and cybersecurity issues online, but on-site interactions were essential for the delivery and training aspects. Their

team had to venture into villages and remote areas in Pakistan to pitch their medical business ideas and provide face-to-face training. Establishing strong business relationships with their clients was easier with personal interactions. Despite the availability of digital formats, including audio and video in multiple languages (e.g., Arabic, English, Chinese, and Turkish), Mohan's clients still preferred to meet the IT team and translators in person. Mohan highlighted the various forms of socialization in different relationships. For him, a part of his socialization involved adapting his language through inner speech and self-talk rehearsal. He used different language and communication styles when speaking with his parents, friends, boss, and customers, emphasizing that people tend to remain true to themselves. He stated that his verbal self-guidance was a form of self-regulation. Mohan was confident that his business would see improved sales revenue if they could meet customers in person rather than solely relying on remote online interactions.

John, the IT consultant, shared a similar experience with Mohan, who worked as a business consultant. John specialized in IT and offered services across various industries, including banking, finance, retail, and more, whereas Mohan focused more on the medical industry. The coding revealed that in-person business discussions were essential. John could conduct research and groundwork from home, but face-to-face interactions were indispensable when delivering presentations and training. Consequently, John needed to travel extensively in Asia to present his business proposals and to provide in-person training in different business models. Establishing robust business relationships with their clients proved challenging without personal interactions during the COVID-19 pandemic. To John, socialization was an integral part of reality, and he expressed that "everybody loves to head out and deal with things." John meticulously rehearsed his business proposals and anticipated conversations through an

intriguing mind-boomerang exercise. He would put himself in his client's shoes, contemplating their perspectives. For him, part of his socialization involved adapting his conversations through inner speech and self-talk rehearsals. John's inner voice represented dialogues between himself and his clients, with two distinct voices playing different scenarios in his mind. Before engaging with his clients in real life, he described his inner speech and self-talk as a form of roleplay. John emphasized that, if a meeting involved multiple parties, he would consider various angles. In anticipation of a potentially confrontational meeting, his inner voice would be in constant motion, planning how to interact and socialize with those individuals while minimizing surprises. John's social interactions were often meticulously planned, and he concluded, "My inner speech and self-talk has provided me with a great deal of valuable support." Multiple participants also shared a common thread: they used inner speech and self-talk as a rehearsal mechanism to memorize their work-related presentations and discussions before meeting with their clients and colleagues. Their perspective on the use of their inner speech and self-talk for memorization aligned with the findings of Cowan (2016) and Schacter et al. (2012), who proposed that active verbalization could assist in memorization activities, suggesting that inner speech could be used as an accelerator to task performance, memorization, communication, and self-fulfillments (Loevenbruck et al., 2018).

Several participants recalled how they used inner speech and self-talk during their childhood, supporting Piaget's (1964, 2006) theory on egocentric speech and private speech typically emerges in early childhood with the development of expressive language skills (Alderson-Day & Fernyhough, 2015; Flavell, 2020; Piaget, 1964, 2006). Chris, a young millennial who worked in system engineering, touched upon the nostalgia of childhood use of inner speech and self-talk when it was a negative experience for him. He recalled how he used to

“knit his thinking and actions simultaneously,” a behavior that the teachers frequently reprimanded. They would instruct him to “Be quiet! Stop talking to yourself; you are disrupting the classroom.” Consequently, Chris found himself trying to keep his self-talk silent. Like Mohan and John, the two business consultants, Chris considered inner speech and self-talk a self-help tool to rehearse long conversations before actual social interactions. He shared that he meticulously planned the words he wanted to say and exactly how he wanted to say them before speaking. Chris strongly believed that inner speech and self-talk helped him sound more eloquent. He advised against impulsively speaking the first word that came to mind, as it might not always help solve the problem and might not be the most logical response in a conversation. The coding revealed that the participants generally agreed that there were many things that people should avoid saying in a professional environment. Chris explained, “The wrong choice of words messes up!” The findings concluded that inner speech and self-talk are a valuable self-help tool for handling interpersonal interactions and managing negative emotions, making them an essential aspect of his life, personally and professionally.

Lastly, Norma, a human resources coordinator, actively engaged in inner speech and self-talk, primarily relying on this mental process during spontaneous and instinctual responses that she described as unthinking reactions, especially in non-work-related situations when experiencing intense anger or profound sadness, emotions that she often preferred to conceal in a social setting. Norma expressed her approach by stating, “Hmm. Ah. I guess I have incorporated the practice of refraining from speaking impulsively when I am upset.” She explained that, in a social setting, she lacked the courage to express her unhappiness or dissatisfaction openly. She refrained from making statements like, “I’m not happy about this,” or “I don’t like this,” as she knew such expressions could hurt other people’s feelings. When Norma was conscious and calm

enough, she engaged in constructive self-talk to determine her course of action in social interactions. During those inner speech and self-talk episodes, she questioned herself, asking, “Should I say this? Why should I say this? I’m really upset; help me with it.” The coding revealed that the participants considered that their inner speech and self-talk was a contemplative tool with which to decide on the most appropriate response. Norma attributed her tendency to rely on inner speech and self-talk to the nature of her role in human resources, where she often received blame and criticism from others. She acknowledged that social interactions were not always easy for her, for she might need to be calmer and more composed than she would like.

In summary, the function of inner speech and self-talk emerged as a vital coping mechanism for the participants in navigating the challenges of remote work and social interaction. Whether grappling with the isolation of virtual environments, seeking to adapt to diverse communication styles, or managing intense emotions, inner speech and self-talk is a self-help tool for enhancing self-discipline, planning interactions, and maintaining composure. It underscored the profound impact of internal dialogue on individual abilities to thrive in both professional and personal spheres amidst the evolving landscapes of work and socialization.

### **Summary**

To provide insight into the significance and impact of inner speech and self-talk among adult remote workers, semistructured interviews were conducted designed to explore the functions of inner speech and self-talk within the context of the participants’ remote work, aiming to uncover its significance and impact. The problem that was studied was the awareness, understanding, and acceptance of inner speech and self-talk. Through the coding process, three themes emerged, illuminating the multifaceted functions of inner speech and self-talk in the lives of the participants. Theme 1, state of consciousness, revealed that most participants displayed a

keen awareness of their inner speech and self-talk, offering detailed insights into their perceptions and experiences. Their experiences proved invaluable for self-reflection, awareness, and efficacy.

Theme 2, self-regulation highlighted how inner speech and self-talk was actively a self-help tool for self-guidance, self-improvement, and emotional regulation. Participants like Chris, Silver, Claire, Abel, and RCJ harnessed inner speech and self-talk to navigate complex tasks, enhance work performance, and facilitate interpersonal interactions. Their narratives revealed the multifaceted ways in which inner speech and self-talk contribute to their overall well-being and personal growth.

Theme 3, social interaction emphasized the vital role inner speech and self-talk played in managing the challenges of remote work, especially in the context of social interaction. Claire, Mohan, and John highlighted the importance of face-to-face interactions and the impact of social isolation on their work experiences. Inner speech and self-talk emerged as a crucial self-help tool for self-discipline, socialization, and navigating the complexities of remote work.

In summary, this qualitative phenomenological study illuminated the profound impact of inner speech and self-talk on adult remote workers. It enhanced their self-awareness and cognitive processes and empowered them as a self-help tool for self-regulation, personal growth, and managing the unique challenges of remote work. These findings offered valuable insights into the diverse applications of inner speech and self-talk. They could inform interventions to improve the remote work experience for this demographic, ultimately addressing the central issue of awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers.

## CHAPTER 5: CONCLUSION

The COVID-19 pandemic, marked by multiple waves and significant disruptions to daily life (Schieman et al. (2022), necessitated widespread changes in various industries and work practices, with a prominent shift towards remote work (Ellsworth et al., 2020). This transformative period underscored the critical importance of maintaining the well-being of remote workers. Specifically, with this research, this principal investigator delved into the problem studied of the awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers, aiming to explore their perceptions and experiences related to this cognitive phenomenon. The participants in this study provided rich insights into the functions of their inner speech and self-talk, unraveling its benefits in unique ways. Their narratives spanned a wide spectrum that encompassed topics such as world travel, finding the right path, repeating positive mantras, spiritual connections, and coping with grief. These diverse accounts illuminated the great ways in which inner speech and self-talk could serve as a valuable self-help tool across various contexts. Notably, the findings reaffirmed the prevalence of inner speech and self-talk in the lives of the participants, aligning with the studies of Dolcos and Albarracín (2014). What was surprising, however, was the predominance of work-related inner speech and self-talk, which well-supported Cowan's (2016) and Schacter et al.'s (2012) concepts of the use of active verbalization that could help with memorization activities, suggesting that inner speech could be used as an accelerator to task performance, memorization, communication, and self-fulfillments (Loevenbruck et al., 2018). In contrast, only a minority of experiences delved into leisure activities and emotions when activities would require less memorization and task performance.

The foundation of this qualitative phenomenological study rested upon Geurts' (2017) recognition of inner speech and self-talk as a fundamental cognitive ability, integral to higher mental functions. By synthesizing the theory of inner speech, which posited that inner speech is an innate ability developed over time (Alderson-Day & Fernyhough, 2015; Banerjee & Rai, 2020; Borghi & Fernyhough, 2022; Geurts, 2017; Geva & Warburton, 2019; Huang, 2021), this principal investigator constructed a conceptual framework to guide this study. This framework, grounded in the participants' lived experiences, was aimed to uncover the subjective qualities and functional characteristics of inner speech and self-talk (Alderson-Day & Fernyhough, 2015; Borghi & Fernyhough, 2022; Geurts, 2017). Throughout this study, two fundamental research questions steered this study's inquiry:

**Research Question 1:** What are the perceptions and experiences of adult remote workers regarding inner speech and self-talk in relation to their functions and use?

**Research Question 2:** How can inner speech and self-talk be used as a self-help tool in a remote work environment?

The ensuing chapters revealed the multifaceted roles that inner speech and self-talk plays in the lives of adult remote workers. Whether used as a tool for coping with isolation, adapting to diverse communication styles, managing emotions, enhancing self-discipline, planning interactions, or maintaining composure, inner speech and self-talk emerged as a versatile resource. Its impact extended beyond professionalism, infiltrating personal decision-making processes, guiding self-improvement journeys, and offering solace during emotional turmoil.

### **Interpretation and Importance of Findings**

The coding process unveiled three distinct but interwoven themes: the state of consciousness, self-regulation, and social interaction. An analysis of these themes explained the



pivotal role played by inner speech and self-talk as a coping mechanism across various facets of participants' lives, personal and professional.

### **Research Question 1**

Research Question 1 was used to investigate the participants' perceptions and experiences regarding inner speech and self-talk, shedding light on its functions and use in the context of remote work. Through the study, this principal investigator sought to comprehend how adult remote workers used inner speech and self-talk to facilitate cognitive processes, enhance communication and socialization, foster self-growth and self-motivation, and manage self-regulation and time effectively. Through this exploration of the multifaceted roles of inner speech and self-talk as a self-help tool, the study addressed the problem of the awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers.

### **Research Question 2**

Research Question 2 was used to explore the potential of inner speech and self-talk as a self-help tool within the remote work environment. By addressing these inquiries, this study aimed to augment the existing body of knowledge concerning remote work and inner speech and self-talk, offering insights into the potential benefits associated with using inner speech and self-talk as a self-help tool for adult remote workers.

A central theme that prominently emerged from participant narratives was the instrumental role of inner speech and self-talk in addressing the challenges inherent to remote work. The participants attested to using inner speech and self-talk to navigate the isolation intrinsic to virtual work settings, adapt to diverse communication styles, and manage intense emotional experiences. In examining the theoretical roots of the participants' inner speech and self-talk experiences, the principal investigator also made reference to Piaget's (1964, 2006)

focus on social aspects of development that Banerjee and Rai's (2020) supported in reaffirming that inner speech and self-talk is an innate ability that people can use for peace and tranquility, which Vygotsky's (1934/1987) perspective also supported that people could simply enjoy their existence by concentrating on individual aspects in their living environment (Huang, 2021). The participant responses during the interviews primarily revolved around their current work situations and their use of inner speech and self-talk in the context of social interactions. Significantly, the participants placed greater emphasis on work-related inner speech and self-talk and relatively less on leisure-related scenarios. Consequently, inner speech and self-talk emerged as an invaluable self-help tool for enhancing self-discipline, facilitating effective interaction planning, and maintaining composure during challenging social circumstances.

Furthermore, the participants revealed how inner speech and self-talk played a pivotal role in their daily lives. It served as a means of introspection and self-awareness, guiding them in their decision-making processes. These findings supported Perrone-Bertolotti et al.'s (2014) and Loevenbruck et al.'s (2018) suggestions that inner speech and self-talk could be recruited to implement verbally based self-instruction. The findings and the literature review helped this study to conclude that inner speech and self-talk proved to be a steadfast companion, offering support and guidance, whether through the repetition of positive affirmations, establishing connections with higher powers, or providing solace during moments of emotional distress. Notably, the participant narratives unveiled varying degrees of awareness and consciousness concerning inner speech and self-talk. Some participants exhibited a high level of awareness, actively observing and analyzing their inner dialogues, while others engaged in it more instinctively and unconsciously. This variation underscored the nuanced nature of inner speech

and self-talk, highlighting their adaptability to individual preferences and needs in both conscious and unconscious state of minds.

### **Implications**

The significant impact of the COVID-19 pandemic and the resulting shifts in the new normal, including economic and social transformations that have affected individuals' well-being, have been extensively documented in various studies (Sakan et al., 2020; Wanberg et al., 2020). These shifts in work and social dynamics led to heightened feelings of isolation and disconnection, making the preservation of well-being an increasingly challenging endeavor. This study addressed the problem of the awareness, understanding and acceptance of inner speech and self-talk by exploring the perceptions and experiences of adult remote workers and their use of inner speech and self-talk as a self-help tool in the remote work environment. By examining the application of inner speech and self-talk within this context, this study offered valuable insights for crafting strategies to enhance well-being within the framework of the post-COVID new normal. Although the importance of healthcare services remains paramount, the multiple waves of COVID-19 precipitated significant changes to daily routines for countless individuals. Industries were compelled to reconfigure their operational models and restructure their workforce (Banerjee & Rai, 2020; Bloom, 2020; Fan & Moen, 2021; Jacks, 2021). The experience of social isolation might have led to an increase in the frequency of inner speech and self-talk (Brinthaup, 2019), thus establishing the rationale for selecting adult remote workers as study participants. Maintaining the well-being of these workers was of utmost importance, particularly considering that remote work remains a relatively novel experience for many employees, both in Canada and globally (Statistics Canada, 2021). The significance of prioritizing the well-being of adult remote workers was also emphasized (OECD, 2021).

In this investigation, the principal investigator secured the voluntary participation of 10 adult remote workers. The participants had the freedom to choose whether to answer or skip any interview questions, and they held full control over their expressions and disclosures, unaffected by any potential influence from the interviewer. Through their contributions, the participants provided valuable insights into the intricacies of using inner speech and self-talk as a self-help tool within the unique context of remote work. The implications of the study's findings were substantial and could yield positive outcomes at various levels, ranging from individuals to communities, and organizations, all of which were pertinent to the current global circumstances.

### **Individuals**

Individuals stand to benefit significantly from increased awareness and understanding of inner speech and self-talk. The participants revealed that inner speech and self-talk served as a valuable tool for managing stress, anxiety, and other emotional challenges, potentially leading to overall improvements in mental wellness. Furthermore, the participants revealed that inner speech and self-talk functioned as a facilitator for self-discipline, decision making, and personal growth. Consequently, inner speech and self-talk could be used as a self-help tool to enhance various aspects of life for individuals. A deeper understanding of inner speech and self-talk could help individuals conceive potential solutions for problems and avoid negative consequences during times of crisis such as the COVID-19 pandemic.

### **Communities**

Fostering a work culture that recognizes the significance of inner speech and self-talk within remote work environments is of paramount importance. The willingness of the participants to share their perceptions and experiences has the potential to stimulate the formation of supportive communities and social networks, facilitating the exchange of insights

and coping strategies among individuals. Through these shared experiences, communities can raise awareness surrounding self-help techniques and mental health, as inner speech and self-talk does not depend on any outside stimulus and can be used voluntarily and effortlessly (Gregory, 2020). Purposeful use of inner speech and self-talk has demonstrated the capacity to yield positive outcomes for well-being (Hurlburt et al., 2022). This heightened awareness of the potential benefits of inner speech and self-talk might inspire community workers to offer resources that empower individuals to use inner speech and self-talk for enhanced mental wellness.

### **Organizations**

The participant responses indicated that organizations bear a social responsibility to enhance the well-being of both on-site and remote workers. Participants like Claire, who employed inner speech and self-talk to achieve higher job satisfaction and productivity, exemplify the potential benefits. The participant narratives suggest that organizations could introduce training programs that educate employees about the functions and advantages of inner speech and self-talk. These mental wellness initiatives could aid employees in their personal and professional development, ultimately contributing to a more robust and resilient workforce.

### **Recommendations for Actions**

Inner speech and self-talk is people's ability to talk to themselves in silence; it is one of the most universal phenomena of everyday experience (Geva & Warburton, 2019). As remote work continues to shape the global workforce, the implications of this research have extended to individuals, communities, and organizations, reinforcing the relevance of motivation theory (Rokach & Goldberg, 2021) in exploring the perceptions and experiences of inner speech and self-talk among this demographic. It was important to know that even if adult remote workers

had fewer social relationships, having a few high-quality relationships with colleagues or peers, using inner speech and self-talk as a self-help tool could help them feel more connected and less lonely (Gates et al., 2023; Venero et al., 2022). The findings revealed that inner speech and self-talk could be used to improve mental wellness in the areas of self-regulation, personal growth, and managing the unique challenges of remote work. This revelation aligns with Geurts' (2017) study in which the principal investigator emphasized that, if remote workers became more isolated, they might rely on self-talk as a means of maintaining their mental wellness and regulating their emotions. This connection between increased remote work and the potential increase in self-talk among remote workers highlighted the crucial role of inner speech in facilitating cognitive processes.

Engaging in considerate actions at present can empower workers to establish new routines, fortify connections, and cultivate inclusive environments that will enable all workers to fully unleash their potential (Ellsworth et al., 2020). The findings in this study serve as evidence to embed more inclusive communicative practices and more effective self-help skills. Incorporating inner speech and self-talk as a practical life skill within community support networks (e.g., local charities, organizations, and helpline services) would benefit remote workers. These initiatives could provide a deeper understanding of the potential applications of inner speech and self-talk education particularly for individuals affected by social isolation, which would extend beyond the realm of remote workers. Therefore, this principal investigator recommends actions for local charities, organizations, and helpline services to design educational programs in the community service sector to elucidate from this study's literature review and findings about the functions of inner speech and self-talk. The inclusion of inner speech and self-talk programs delivered in the community support networks and services as practical life lessons

to mirror the approach taken by participants such as RCJ, who explicitly taught his children how to use inner speech and self-talk, drawing from his own formal education experiences that date back to his graduate studies. This principal investigator recommends that these community service programs encompass basic self-improvement techniques and serve as an awakening of people's innate ability for the awareness, understanding, and acceptance of inner speech and self-talk among but not limited to adult remote workers. She also recommends that the community support networks and services discuss the themes in this study, including the state of consciousness, self-regulation, and social interaction. Their educational programs can be fine-tuned to target different audiences according to their level of awareness and consciousness regarding inner speech and self-talk among participants. It is important to respect that some people could have a high level of awareness, actively observing and analyzing their inner dialogue, while others could be engaged in it more automatically and unconsciously. This variation underscores the nuanced nature of inner speech and self-talk and their adaptability to meet individual preferences and needs. For example, this principal investigator suggests action, including the practice of in-person and online sessions of positive inner speech and self-talk, and the development of a connection between inner speech and self-talk and lucid dreaming. This suggestion is made because she believes that practices like lucid dreaming can invigorate spirits, foster imagination and positivity, and empower individuals to enhance their mental wellness, particularly in the context of social isolation. This principal investigator believes that healthcare professionals can prescribe positivity as a self-help tool for physical and mental wellness. This recommendation extends to scientists, researchers, and writers worldwide who can contribute their efforts through journals, books, and webinars, supporting discussions on cultural and social values that profoundly affect individual well-being. Drawing from theories of human motivation,

love, and social belonging (Rokach & Goldberg, 2021), these efforts can collectively support the ongoing discourse on inner speech and self-talk and their role in promoting mental wellness.

### **Recommendations for Further Study**

The problem to be studied was the awareness, understanding and acceptance of inner speech and self-talk among adult remote workers. When adult remote workers did not have any colleagues to talk to in-person, it was a real-world problem of lived experiences in the context of inner speech and self-talk that the remote workers' challenges posed. The findings and results of this study highlighted the significance of inner speech as an innate ability that plays a crucial role in higher mental functions, encompassing reasoning, problem solving, planning, plan execution, attention, and motivation. In studying this subject further, researchers should focus on the several limitations associated with this qualitative phenomenological study. The participants were asked to provide information, perceptions, and experiences regarding their use of inner speech and self-talk, but it is essential that researchers who conduct further study on this topic acknowledge that the language and concepts used in social dialogue during interviews might not always fully capture the nuances and complexities of the inner speech perceptions and experiences of the participants. To enhance the accuracy of such representations in social dialogue, future researchers are encouraged to share interview questions in advance, mitigating potential memory biases. Additionally, allocating more time for participants to articulate their inner speech and self-talk experiences during interviews could alleviate challenges associated with accurately describing the inner experiences in words.

Purposeful sampling is another limitation associated with this qualitative phenomenological study. For this study, this principal investigator recruited participants from the LinkedIn community, potentially introducing bias by favoring individuals who are familiar with



social media platforms and technology. To mitigate such biases, future researchers are encouraged to diversify sample sources and include individuals who are less technologically inclined (e.g., people from the industries of medicine, artificial intelligence, higher education, and finance) in this study. Furthermore, the study was focused primarily on English-speaking remote workers on the LinkedIn social media platform, which might not account for variations in cultural, educational, and social values among a broader population. Additionally, given that this study occurred in the postpandemic era, the participants might not accurately remember their experiences prior to the pandemic, future researchers are encouraged to maintain objectivity and minimize preconceptions.

Although Creswell and Guetterman (2019) suggested that small sample sizes often suffice for achieving data saturation and conducting time-intensive coding in most qualitative studies, future researchers are encouraged to invest more time to reach a larger sample size to improve generalizability to other contexts beyond adult remote workers and other populations. Acknowledging and addressing these delimitations by expanding boundaries could provide a more nuanced understanding of inner speech and self-talk, facilitating a more critical and reflexive data analysis. In line with Gregory's (2018) theory, the development of high self-efficacy remains crucial during and after the pandemic. When thinking about recommendations for further study, it is vital to consider the economic context at a particular time among broader populations within expanded boundaries. The increased stress resulting from economic downturns (Mucci et al., 2016) and in line with the American Psychiatric Association's (2021) report, more than one third of Americans believe that the coronavirus had a painful impact on their mental wellness. To address the decline in mental wellness after the pandemic, it is imperative that future researchers focus on the essential maintenance of a healthy lifestyle,

encompassing both physical and mental aspects and underscoring the necessity to foster habitual routines, accomplish tasks, and attain personal objectives within a natural environment (Giuntella et al., 2021). From this study, this principal investigator believes that inner speech and self-talk can emerge as an effective cognitive strategy for fostering habitual routines, accomplishing tasks, and attaining personal objectives within a natural environment through mental imagery, beliefs, and assumptions. The findings of this study underscored the significance of inner speech and self-talk as a tool for enhancing mental wellness, justifying the need for further study of inner speech and self-talk functions and benefits. The functions of inner speech and self-talk could influence how people felt and behaved, which could have a significant impact on their mental wellness (Alderson-Day & Fernyhough, 2015; Brinthaupt, 2019; Geva & Warburton, 2019).

Drawing on this study's insights into the functions and usage of inner speech and self-talk and the participants' experiences, the findings revealed that external influences (e.g., shifting job responsibilities and work settings) had minimal impact on the participants' perceptions of inner speech and self-talk. Most participants reported favorable views of inner speech and self-talk, demonstrating their conscious and purposeful use of this innate ability to align with cognitive needs and personal goals. Considering these findings gained from this study of the functions and use of inner speech and self-talk, recommendations for further study were drawn from the study's limitations, delimitations, and collected data that emphasized the need for continued exploration and practical application. Future researchers are encouraged to take initiatives in practicing national research that would be focused on developing resources and tools to promote positivity and to bridge the knowledge gap surrounding inner speech and self-talk. The practice of remote work has become a cultural norm, accelerated by extensive information technology use

(e.g., cloud computing, video conferencing, collaboration platforms, and high-speed Internet; Jacks, 2021); therefore, future researchers are encouraged to prioritize their research topics meeting the public needs by collaborating with community service networks, including local charities, organizations, and helpline services that can allocate financial and human resources to design community-based educational programs rooted in this study's literature review and findings on the functions of inner speech and self-talk.

Future researchers should seek shared experiences of inner speech and self-talk among diverse individuals, including board members, management personnel, employees, and volunteers who are actively involved in community services across various sectors and industries, encompassing government-funded, nonprofit, and not-for-profit programs. The wealth of insights gained from these diverse voices would contribute to a deeper understanding and better serve thriving communities today and in the future. Envisioning future studies guided by the overarching goal of highlighting inner speech and self-talk as an innate ability possessed by all people, this principal investigator anticipates that this study will play a crucial role in raising awareness and promoting understanding across a spectrum of settings, including individuals, communities, and organizations. With their collective efforts and contributions in further study on the topic of inner speech and self-talk's functions and benefits, this type of community education will provide effective strategies for advancing and amplifying inner speech and self-talk usage to improve mental wellness. These educational efforts will contribute to an improved understanding and appreciation of this innate human ability.

### **Conclusion**

In the wake of the COVID-19 pandemic, the world witnessed a profound transformation in work dynamics, leading to the widespread adoption of remote work. This transformation

demanded a deeper understanding of the challenges that remote workers face and the strategies that they employ to navigate this shifting landscape. This qualitative phenomenological study involved 10 participants who were recruited from the LinkedIn social media hub to assist this principal investigator in seeking to explore the perceptions and experiences of adult remote workers regarding inner speech and self-talk. Through a meticulous examination of their narratives and reflections, revealing several themes related to the awareness, understanding, and acceptance of inner speech and self-talk. Three interconnected themes emerged: the state of consciousness, self-regulation, and social interaction.

These themes revealed variations in the level of awareness and consciousness regarding inner speech and self-talk among the participants, highlighting their nuanced nature and adaptability to individual preferences and needs. The findings underscored the multifaceted functions of inner speech and self-talk as a powerful self-help tool, enriching the lives of individuals within the ever-evolving landscape of remote work and socialization. The results illuminated the challenges that remote work poses and highlighted the significance of inner speech as an innate ability that plays a crucial role in higher mental functions, encompassing reasoning, problem solving, planning, plan execution, attention, and motivation. This study significantly contributed to the comprehension of the awareness, understanding, and acceptance of inner speech and self-talk among adult remote workers. In line with Gregory's (2018) theory, the development of high self-efficacy remains crucial during and after the pandemic, for individuals must yet grapple with added stressors that stem from economic downturns and the imperative to maintain a healthy lifestyle—physically and mentally—that necessitate the cultivation of routine habits, task performance, and the achievement of personal goals within a natural environment. Thus, inner speech and self-talk emerge as an effective cognitive strategy

for attaining these goals using mental imagery, beliefs, and assumptions. The profound impact of inner speech and self-talk on the lives of adult remote workers shows its versatility and significance in enhancing well-being within and outside the workplace. Their inner dialogues functioned as versatile tools, aiding in coping with isolation, adapting to diverse communication styles, managing intense emotions, enhancing self-discipline, facilitating effective interaction planning, and maintaining composure during challenging social circumstances. Furthermore, inner speech and self-talk extend beyond the professional sphere to play a pivotal role in personal decision-making processes, guiding self-improvement journeys, and offering solace during emotional distress. This reaffirmed the prevalence of inner speech and self-talk, aligning this study with previous studies.

One notable revelation was the prominence of work-related inner speech and self-talk, aligning with Cowan's (2016) and Schacter et al.'s (2012) concepts that active verbalization aids in memorization and task performance. The participants predominantly relied on inner speech and self-talk in work-related contexts where memorization and task performance were paramount, while leisure-related scenarios elicited less engagement with inner speech and self-talk. As remote work continues to shape the global workforce, the implications of this research are extended to individuals, communities, and organizations, reinforcing the relevance of motivation theory (Rokach & Goldberg, 2021) in exploring the perceptions and experiences of inner speech and self-talk among this demographic group. Moving beyond individual implications, this study shed light on the broader societal and organizational aspects. This study not only enhanced the comprehension of inner speech and self-talk among adult remote workers, but also offered valuable insights for fostering a work culture that recognizes the significance of inner speech and self-talk within remote work environments. By encouraging the exchange of

insights and coping strategies among remote workers, communities can raise awareness about self-help techniques and mental health. Organizations, however, hold a social responsibility to enhance the well-being, productivity, and overall job satisfaction of their workforce by introducing training programs on the functions and advantages of inner speech and self-talk.

Regarding further study, this study has paved the way for continued exploration of inner speech and self-talk. Their potential to improve mental wellness, aid in self-regulation, and enhance cognitive processes underscores their importance in contemporary society, particularly in the context of remote work. Future research initiatives could elaborate with community support networks to design educational programs that promote inner speech and self-talk as a practical life lesson, benefiting not only remote workers, but also diverse audiences. By advancing awareness, understanding, and acceptance of inner speech and self-talk, people can empower individuals to harness this innate human ability for personal growth and enhanced well-being. In conclusion, the profound impact of the COVID-19 pandemic and the subsequent transformation of work and social dynamics have made it increasingly crucial to explore and harness inner speech and self-talk as a self-help tool. This principal investigator's findings in this study will have far-reaching implications, encompassing individuals, communities, organizations, and institutions, and will contribute to a deeper appreciation of the power of inner speech and self-talk in enriching lives within the evolving landscape of remote work in the post-COVID, new normal world.

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## APPENDIX A

## PARTICIPANT RECRUITMENT MESSAGE

Subject: A qualitative phenomenological study of inner speech/self-talk used as a self-help tool among adult remote workers

Dear LinkedIn Member,

I am currently a doctoral student at the University of New England. I am conducting a study titled “A qualitative phenomenological study of inner speech/self-talk used as a self-help tool among adult remote workers” for my dissertation. The purpose of this qualitative, phenomenological study was to explore the perceptions and experiences of adult remote workers regarding their use of inner speech/self-talk. I am seeking 10 participants to participate in my doctoral research study.

You are eligible to participate in this study if you:

- Are over 18 years old
- A remote worker
- Identifying as a remote worker on LinkedIn

Participation in this research is voluntary. It involves one recorded interview lasting approximately 30 minutes. The interview will be conducted on Google Meet at a time of your convenience. If there are more than 10 people who express interest, only the first 10 individuals will be selected for an interview. All data will be kept confidential, and pseudonyms will be used to protect the identities of respondents. All identifying information, including names, email addresses, company names, and locations, will be deidentified.

Please review the attached Participant Information Sheet, which outlines the specific details about this study, including confidentiality and privacy measures.

If you are interested in sharing your inner speech/self-talk experience, please contact me via email at [jyeung@une.edu](mailto:jyeung@une.edu), and we can set up a time for an interview via Google Meet.

If you would like additional information or have any questions, please reach out to me at the above listed email.

Thank you for considering participation in this study.  
Sincerely,

Jennie Yeung, MSED  
Doctoral Student  
University of New England

## APPENDIX B

## PARTICIPANT INFORMATION SHEET



INNOVATION FOR A HEALTHIER PLANET

Office of Research Integrity  
Institutional Review Board

## Participant Information Sheet

Version Date:	August 18, 2023
IRB Project #:	IRB # 0823-07
Title of Project:	A QUALITATIVE PHENOMENOLOGICAL STUDY OF INNER SPEECH USED AS A SELF-HELP TOOL AMONG ADULT REMOTE WORKERS
Principal Investigator (PI):	Jennie Yeung
PI Contact Information:	jyeung@une.edu      416 918 6512

**INTRODUCTION**

- This is a project being conducted for research purposes. Your participation is completely voluntary.
- The intent of the Participant Information Sheet is to provide you with important details about this research project.
- You are encouraged to ask any questions about this research project, now, during or after the project is complete.
- The use of the word 'we' in the Information Sheet refers to the Principal Investigator and/or other research staff.

**WHAT IS THE PURPOSE OF THIS PROJECT?**

The general purpose of this research project is to explore the perceptions and experiences of adult remote workers regarding their use of inner speech/self-talk. Ten participants will be invited to participate in this research as part of the principal investigator's dissertation research.

**WHY ARE YOU BEING ASKED TO PARTICIPATE IN THIS PROJECT?**

You are being asked to participate in this research project because you are a remote worker, over 18 years old, and a remote worker and identifying as a remote worker on LinkedIn.

**WHAT IS INVOLVED IN THIS PROJECT?**

- You will be asked to participate in one semi-structured interview via Google Meet with the principal investigator that will last approximately 30 minutes.
- You can choose a pseudonym to be used in place of your name for the study.
- You will be given the opportunity to leave your camera on or off during the interview, and your interview will be recorded using Google Meet.
- You will be emailed a copy of your interview transcript to review for accuracy. You will have five calendar days to respond, or the PI will assume that you have no comments, and the transcript will be assumed to be accurate.

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INNOVATION FOR A HEALTHIER PLANET

Office of Research Integrity  
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**WHAT ARE THE POSSIBLE RISKS OR DISCOMFORTS INVOLVED FROM BEING IN THIS PROJECT?**

The risks involved with participation in this research project are minimal and may include an invasion of privacy or breach of confidentiality. You have the right to skip or not answer any questions, for any reason.

Please see the 'WHAT ABOUT PRIVACY & CONFIDENTIALITY?' section below for steps we will take to minimize an invasion of privacy or breach of confidentiality from occurring.

**WHAT ARE THE POSSIBLE BENEFITS FROM BEING IN THIS PROJECT?**

There are no likely benefits to you by being in this research project; however, the information to be collected may contribute to a better understanding of people's perceptions of inner speech/self-talk.

**WILL YOU BE COMPENSATED FOR BEING IN THIS PROJECT?**

You will not be compensated for being in this research project.

**WHAT ABOUT PRIVACY AND CONFIDENTIALITY?**

We will do our best to keep your personal information private and confidential. However, we cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Additionally, your information in this research project could be reviewed by representatives of the University such as the Office of Research Integrity and/or the Institutional Review Board.

The results of this research project may be shown at meetings or published in journals to inform other professionals. If any papers or talks are given about this research, your name will not be used. We may use data from this research project that has been permanently stripped of personal identifiers in future research without obtaining your consent.

- Data will only be collected during one-on-one participant interviews via Google Meet, no information will be taken without your consent, and transcribed interviews will be checked by you for accuracy before they are added to the study.
- Pseudonyms will be used for all participants and any personally identifying information will be stripped from the interview transcript.
- All names and e-mails gathered during recruitment will be recorded and linked to a uniquely assigned pseudonym within a master list.
- The master list will be kept securely and separately from the study data and accessible only to the principal investigator.
- The interview will be conducted in a private setting to ensure others cannot hear your conversation.
- You will be given the option to turn off your camera during the Google Meet interview.

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RES-T-001; Rev 1; Effective Date: 11/14/2022



Office of Research Integrity  
Institutional Review Board

INNOVATION FOR A HEALTHIER PLANET

- After you have verified the accuracy of your transcribed interview, the recorded interview will be destroyed. Once all transcripts have been verified by the participants of this project, the master list of personal information will be destroyed.
- All other study data will be retained on record for 3 years after the completion of the project and then destroyed. The study data may be accessed upon request by representatives of the University (e.g., faculty advisors, Office of Research Integrity, etc.) when necessary.
- Storage of paper records will be kept in a locked file cabinet accessible only by the Principal Investigator.
- All data collected will be stored on a password protected personal computer accessible only by the principal investigator.

**WHAT IF YOU WANT TO WITHDRAW FROM THIS PROJECT?**

You have the right to choose not to participate, or to withdraw your participation at any time until the Master List is destroyed without penalty or loss of benefits. You will not be treated differently if you decide to stop taking part in this project.

If you request to withdraw from this project, the data collected about you will be deleted when the master list is in existence, but the researcher may not be able to do so after the master list is destroyed.

**WHAT IF YOU HAVE QUESTIONS ABOUT THIS PROJECT?**

You have the right to ask, and have answered, any questions you may have about this research project. If you have questions about this project, complaints or concerns, you should contact the Principal Investigator listed on the first page of this document.

**WHAT IF YOU HAVE QUESTIONS ABOUT YOUR RIGHTS AS A RESEARCH PARTICIPANT?**

If you have questions or concerns about your rights as a research participant, or if you would like to obtain information or offer input, you may contact the Office of Research Integrity at (207) 602-2244 or via e-mail at [irb@une.edu](mailto:irb@une.edu).

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RES-T-001; Rev 1; Effective Date: 11/14/2022



## APPENDIX C

## INTERVIEW QUESTIONS

1. Please describe what inner speech/self-talk means to you.
2. How would you describe your experience with inner speech/self-talk?
3. What was it like for you when you talked to yourself when you were a young child?
4. What is it like for you when you talk to yourself now as an adult?
5. How do you use inner speech/self-talk?
6. How do you use self-talk as a self-help tool to help you to think/understand, and/or to perform an action?
7. Describe how often you talked to yourself before you started working remotely?
8. As an adult remote worker now, have you experienced any change in your inner speech/self-talk usage, and how do you feel about it?
9. What do you see as the role of inner speech/self-talk in your self-regulation?
10. What, if any, do you feel are the functions of inner speech/self- talk that have benefits for you?

APPENDIX D  
IRB APPROVAL LETTER



INNOVATION FOR A HEALTHIER PLANET

**Office of Research Integrity  
Institutional Review Board**

Biddeford Campus  
11 Hills Beach Road  
Biddeford, ME 04005  
(207) 602-2244 T  
(207) 602-5905 F

Portland Campus  
716 Stevens Avenue  
Portland, ME 04103

**DATE OF LETTER:** August 21, 2023

**PRINCIPAL INVESTIGATOR:** Jennie Yeung  
**FACULTY ADVISOR:** Ella Benson, Ed.D.

**PROJECT NUMBER:** 0823-07  
**RECORD NUMBER:** 0823-07-01

**PROJECT TITLE:** A QUALITATIVE PHENOMENOLOGICAL STUDY OF INNER SPEECH USED AS A SELF-HELP TOOL AMONG ADULT REMOTE WORKERS

**SUBMISSION TYPE:** New Project  
**SUBMISSION DATE:** August 13, 2023

**ACTION:** Determination of Exempt Status  
**DECISION DATE:** August 21, 2023

**REVIEW CATEGORY:** Exemption Category # 2(ii)

The Office of Research Integrity has reviewed the materials submitted in connection with the above-referenced project and has determined that the proposed work is exempt from IRB review and oversight as defined by 45 CFR 46.104.

You are responsible for conducting this project in accordance with the approved study documents, and all applicable UNE policies and procedures.

**If any changes to the design of the study are contemplated (e.g., revision to the research proposal summary, data collection instruments, and/or other approved study documents), the Principal Investigator must submit an amendment for review to ensure the requested change(s) will not alter the exempt status of the project.**

If you have any questions, please send an e-mail to [irb@une.edu](mailto:irb@une.edu) and reference the project number as specified above within the correspondence.

Best Regards,

Bob Kennedy, MS  
Director of Research Integrity